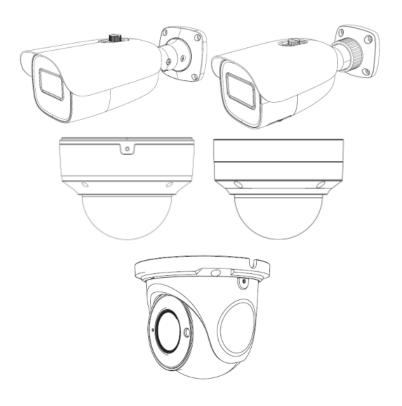
(H) HOLIS

Holis Bullets, Domes and Turret cameras Installation and Configuration Guide





Notice

Please read this manual thoroughly and save it for future use before attempting to connect or operate this unit.

The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

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Warning

- This product is intended to be supplied by a Listed Power Unit, marked with 'Limited Power Source', 'LPS' on unit, output rated minimum 12V/2 A or POE 48V/ 350mA or AC24V (depending on models), no more than 2000m altitude of operation and Tma=60 Deg.C.
- As for the modes with PoE function, the function of the ITE being investigated to IEC 60950-1 standard is considered not likely to require connection to an Ethernet network with outside plant routing, including campus environment and the ITE is to be connected only to PoE networks without routing to the outside plant.
- Do not attempt to disassemble the camera; in order to prevent electric shock, do not remove screws or covers.
- There are no user-serviceable parts inside. Please contact the nearest service center as soon as possible if there is any failure.
- Avoid from incorrect operation, shock vibration, heavy pressing which can cause damage to product.
- Do not use corrosive detergent to clean main body of the camera. If necessary, please use soft dry cloth to wipe dirt; for hard contamination, use neutral detergent. Any cleanser for high grade furniture is applicable.
- Avoid aiming the camera directly towards extremely bright objects, such as, sun, as this
 may damage the image sensor.
- Please follow the instructions to install the camera. Do not reverse the camera, or the reversing image will be received.
- Do not operate it in case temperature, humidity and power supply are beyond the limited stipulations.
- Keep away from heat sources such as radiators, heat registers, stove, etc.
- Do not expose the product to the direct airflow from an air conditioner.
- This manual is for using and managing the product. We may reserve the rights of amending
 the typographical errors, inconsistencies with the latest version, software upgrades and
 product improvements, interpretation and modification. These changes will be published in
 the latest version without special notification.
- All pictures, charts, images in this manual are only for description and explanation of our products. The ownerships of trademarks, logos and other intellectual properties related to Microsoft, Apple and Google belong to the above-mentioned companies.
- This manual is suitable for face detection network cameras.

Overview

This Holis cameras Installation and Configuration Guide is a user manual which provides installation, and configuration information of the camera in Table 1 on Page 7.

Table 1 Product codes

Product Code	Model Name	Description
JSE04-T02-BI01	Holis 4MP IR Turret camera	Holis 4MP IR Turret camera, H.265 4MP IR Turret Dome N/W Camera, 2.8~12mm Manual, 30M IR, Micro SD, DC12V/PoE, IP67
JSE04-B02-Ol01	Holis 4MP IR Bullet camera	Holis 4MP IR Bullet camera, H.265 4MP IR Bullet N/W Camera, 2.8~12mm Manual, 50M IR, Micro SD, DC12V/PoE, IP67/IK10
JSV02-B04-OI01	Holis 2MP Motorized Varifocal IR Bullet cam- era	Holis 2MP Motorized Varifocal IR Bullet camera, H.265 2MP Motorized V/F IR Bullet N/W Camera, 7-22mm, 100M IR, Micro SD, DC12V/PoE, IP67/IK10
JSE04-D10-Ol01	Holis 4MP IR Dome camera	Holis 4MP IR Dome camera, H.265 4MP IR Vandal Proof Dome N/W Camera, 2.8mm, 30M IR, Micro SD, DC12V/PoE, IP67/IK10
JSE04-D30-Ol01	Holis 4MP IR Dome camera	Holis 4MP IR Dome camera, H.265 4MP IR Vandal Proof Dome N/W Camera, 3.6mm, 30M IR, Micro SD, DC12V/PoE, IP67/IK10
JSV02-D02-Ol01	Holis 2MP Motorized Varifocal Dome camera	Holis 2MP Motorized Varifocal Dome camer, H.265 2MP Motorized V/F IR Vandal Proof Dome N/W Camera, 2.8-12mm, 50M IR, Micro SD, DC12V/PoE, IP67/IK10

Holis 4MP IR Turret camera

This chapter provides general quick start guide information on the camera and installation procedures.

In the box

- 1 x Camera
- 1 x Quick Start Guide
- 3 x PA 4x25mm Tapping screws
- 1 x L-Key Hexagonal wrench
- 1 x Mounting template
- 3 x 6x25mm Plastic screw anchors
- 3 x Silicone plugs
- 1 x Regulatory Document

Installation tools

- Screwdriver
- Drill
- L-Key Hexagonal wrench

Figure 2 Camera parts

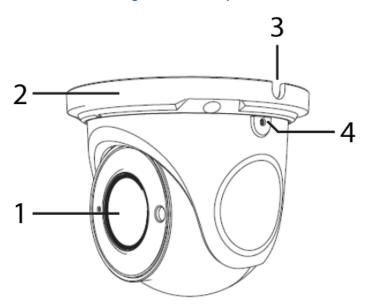


Table 3 Camera part descriptions

Number	Camera Part description
1	Camera lens
2	Camera base
3	Cable side entry slot
4	Fixed screw

Figure 4 Cable connections

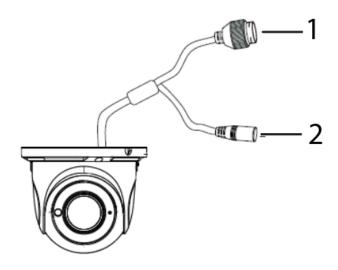
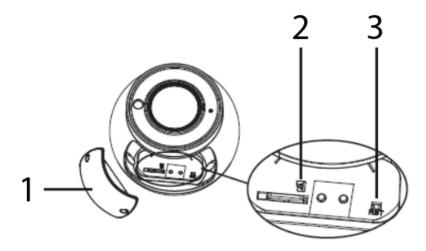


Table 5 Cable connections descriptions

Number	Cable connection description
1	Ethernet connector and also supports PoE
2	Power connector (12VDC @ 1A)

Figure 6 Micro SD card slot and reset button



Note:Remove the two screws on the camera cover (1) (Figure 6) to access the buttons. Securely attach the cover when finished.

Table 7 Micro SD card slot and reset button descriptions

Number	Camera button description
1	Camera button cover
2	Micro SD card slot
3	Reset button (Hold for more than 3 seconds)

Quick reference

- Default IP: 192.168.1.168 (DHCP enabled).
- Default Username / Password: admin / admin
- Power: DC12V or PoE
- Use Internet Explorer 11 web browser.

Procedure 1 Mounting the camera to a wall or ceiling

Ensure that the wall or ceiling is strong enough to withstand three times the weight of the camera.

- 1 Place the mounting template on the surface that you want to attach the camera.
- 2 On the surface drill three Ø 4.5mm holes and cut out a cable hole as per the markings identified on the mounting template.
- 3 Securely place the three screw anchors into the three holes.
- Place the camera cable through the cable hole on the mounting surface and ensure that the three cable side entry plugs are inserted into the three slots on the camera base (2) (Figure 2) OR

Use the cable side entry hole slot (3) (Figure 2) on the camera base and ensure that two of the cable side entry plugs are inserted into the remaining two slots on the camera base.

- Hold the camera up to the mounting template and align the three holes on the camera base with the three holes on the mounting surface.
- Insert the three tapping screws into the three holes on the camera base and securely attach the camera to the mounting surface.
- 7 To power up the camera:
 - Connect a 12V DC power supply to the power connector on the camera cable.

OR

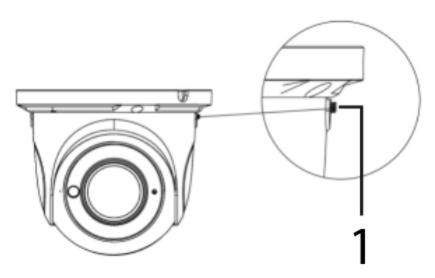
• Connect a shielded PoE cable to the ethernet / PoE slot on the camera cable.

- End -

Procedure 2 Adjusting the camera position

- 1 Use the L-key hexagonal wrench to:
 - a Unlock the screw (1) (Figure 8) and pan the camera field of view up to 360 degrees.

Figure 8 Adjusting the camera position



Note:Note: You must securely lock the screw to ensure that the camera holds the modified position.

Procedure 3 Adjusting the camera zoom and focus

- 1 Use the screwdriver to remove the two screws on the cover.
- 2 Rotate the 'Focus' and / or 'Zoom' buttons (Figure 9) as desired.

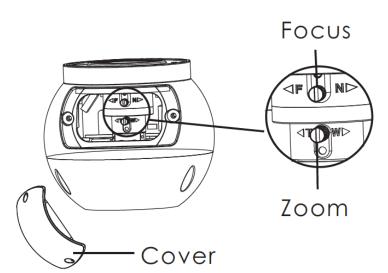


Figure 9 Adjusting the camera zoom and focus

Note: You must securely attach the cover when finished adjusting the Focus or Zoom.

Holis 4MP IR Bullet camera

This chapter provides general quick start guide information on the camera and installation procedures.

In the box

- 1 x Camera
- 1 x Quick Start Guide
- 4 x PA 4x25mm tapping screws
- 1 x PWM 3x5mm machine screw
- 1 x Mounting template
- 1 x Silicone plug
- 4 x 6x25mm Plastic screw anchors

Installation tools

- Screwdriver
- Drill

Figure 10 Camera parts

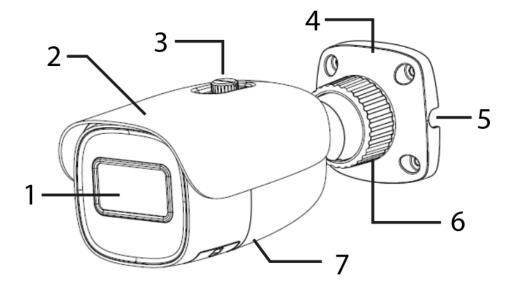


Table 11 Camera part descriptions

Number	Camera Part description
1	Camera lens
2	Sun shield cover
3	Sun shield cover adjustment thumb-screw
4	Camera base
5	Cable side entry slot
6	Camera fixing ring
7	Camera body (Buttons and SD card slot are located on the underside of the camera). Note: You need to remove the cover to access them.

Figure 12 Cable connections

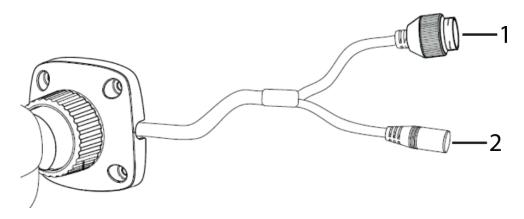
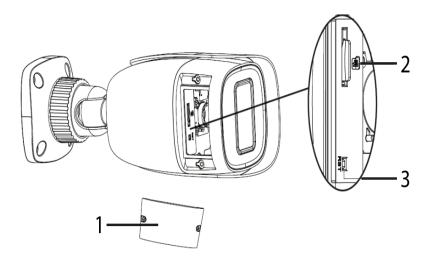


Table 13 Cable connections descriptions

Number	Cable connection description
1	Ethernet connector and also supports PoE
2	Power connector (12VDC @ 1A)

Figure 14 Micro SD card slot and reset button



Note:Remove the two screws on the camera cover (1) (Figure 14) to access the buttons. Securely attach the cover when finished.

Table 15 Micro SD card slot and reset button descriptions

Number	Camera button description
1	Camera button cover
2	Micro SD card slot
3	Reset button (Hold for more than 3 seconds)

Quick reference

• Default IP: 192.168.1.168 (DHCP enabled).

• Default Username / Password: admin / admin

• Power: DC12V or PoE 48VDC

• Use Internet Explorer 11 web browser.

Procedure 4 Mounting the camera to a wall or ceiling

Ensure that the wall or ceiling is strong enough to withstand three times the weight of the camera.

- 1 Place the mounting template on the surface that you want to attach the camera.
- 2 On the surface drill four Ø 4.6mm holes and cut out a cable hole as per the markings identified on the mounting template.
- 3 Securely place the four screw anchors into the four holes.
- 4 Place the camera cable through the cable hole on the mounting surface.

OR

Use the cable side entry hole slot (5) (Figure 10) on the camera base.

Note:If you are not using the cable side entry slot ensure that the cable side entry plug is inserted into the slot on the camera base.

- Hold the camera base (4) (Figure 10) up to the mounting template and align the four holes on the camera base with the four holes on the mounting surface.
- Insert the four screws into the four holes on the camera base and securely attach the camera to the mounting surface.

Note: The camera must be connected to earth ground.

Attach a ring-type terminal to the end of the ground wire (2) (Figure 16) (not provided). Insert the machine screw through the ring terminal and attach to the camera (1) (Figure 16).

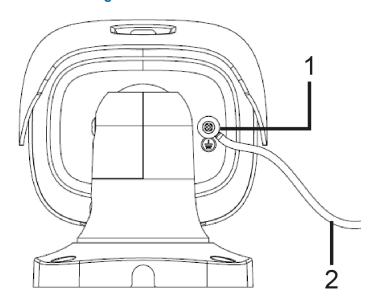


Figure 16 Earth wire connection

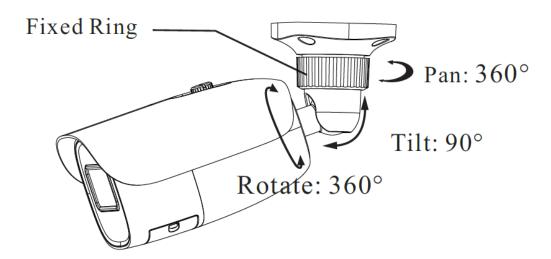
- 8 To power up the camera:
 - Connect a 12V DC power supply to the power connector on the camera cable.

OR

 Connect a shielded PoE cable to the ethernet / PoE slot on the camera cable.

- End -

Figure 17 Pan, tilt and rotate screws



Holis 2MP Motorized Varifocal IR Bullet camera

This chapter provides general quick start guide information on the camera and installation procedures.

In the box

- 1 x Camera
- 1 x Quick Start Guide
- 4 x PA 4x25mm tapping screws
- 1 x PWM 3x5machine screw
- 1 X Mounting template
- 4 x 6x25mm Plastic screw anchors
- 1 x L-Key Hexagonal wrench
- 1 x CVBS & DC IN cable
- 1 x Regulatory Document

Installation tools

- Screwdriver
- Drill
- L-Key Hexagonal wrench

Figure 18 Camera parts

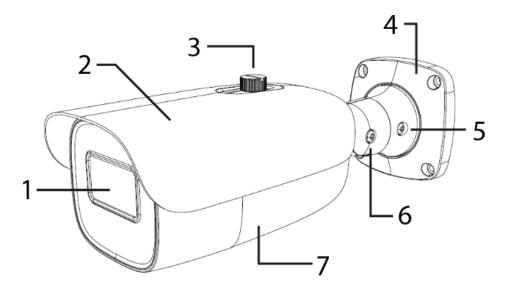


Table 19 Camera part descriptions

Number	Camera Part description
1	Camera lens
2	Sun shield cover
3	Sun shield cover adjustment thumb-screw
4	Camera base
5	Pan adjustment connection
6	Tilt adjustment connection
7	Camera body (Buttons and SD card slot are located on the underside of the camera). Note: You need to remove the cover to access them.

Figure 20 Cable connections

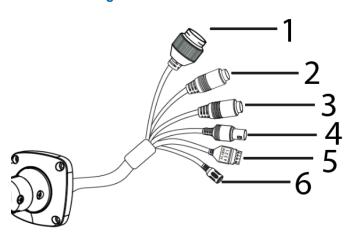
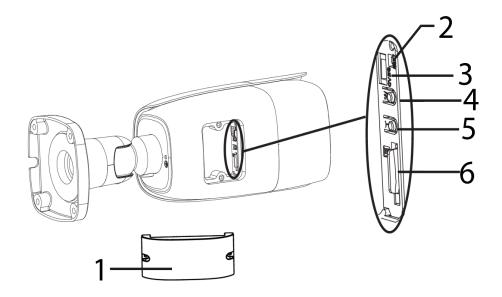


Table 21 Cable connections descriptions

Number	Cable connection description
1	Ethernet connector and also supports PoE
2	Audio Input
3	Audio Output
4	CVBS Video Output
5	Alarm Input / Output
6	Power connector (12VDC @ 1A)

Figure 22 Micro SD card slot and reset button



Note:Remove the two screws on the camera cover (1) (Figure 22) to access the buttons. Securely attach the cover when finished.

Table 23 Micro SD card slot and reset button descriptions

Number	Camera button description
1	Camera button cover
2	Reset button (Hold for more than 3 seconds)
3	CVBS & DC IN Interface
4	Zoom Out
5	Zoom In
6	Micro SD card slot

Quick reference

- Default IP: 192.168.1.168 (DHCP enabled).
- Default Username / Password: admin / admin
- Power: AC24V / DC12V or PoE 48VDC
- Use Internet Explorer 11 web browser.

Procedure 5 Mounting the camera to a wall or ceiling

Ensure that the wall or ceiling is strong enough to withstand three times the weight of the camera.

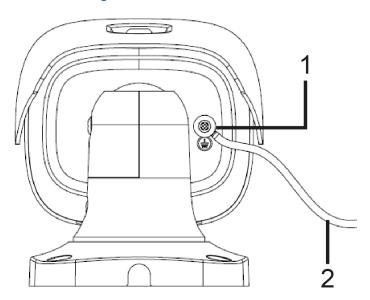
- 1 Place the mounting template on the surface that you want to attach the camera.
- On the surface drill four \emptyset 4.6mm holes and cut out a cable hole as per the markings identified on the mounting template.
- 3 Securely place the four screw anchors into the four holes.

- 4 Place the camera cable through the cable hole on the mounting surface.
- Hold the camera base (4) (Figure 18) up to the mounting template and align the four holes on the camera base with the four holes on the mounting surface.
- Insert the four screws into the four holes on the camera base and securely attach the camera to the mounting surface.

Note: The camera must be connected to earth ground.

Attach a ring-type terminal to the end of the ground wire (2) (Figure 24) (not provided). Insert the machine screw through the ring terminal and attach to the camera (1) (Figure 24).

Figure 24 Earth wire connection



- 8 To power up the camera:
 - Connect a 12V DC power supply to the power connector on the camera cable.

OR

 Connect a shielded PoE cable to the ethernet / PoE slot on the camera cable.

- End -

Procedure 6 Adjusting the sun shield

Loosen the thumb-screw (3) (Figure 18) to move the sun shield cover forward and backward over the camera body (6) (Figure 18).

Note:You must securely lock the thumb screw to ensure that the sun shield cover holds the modified position.

- End -

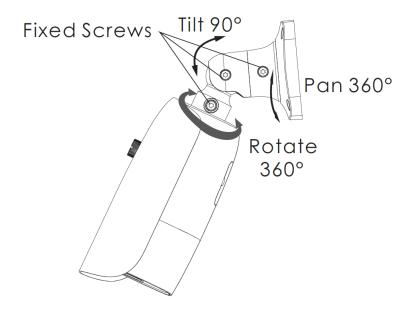
Procedure 7 Adjusting the camera position

- 1 Use the L-key hexagonal wrench to:
 - a Unlock the pan screw (Figure 25) and pan the camera field of view up to 360 degrees.
 - b Unlock the tilt screw (Figure 25) to tilt the camera body up to 90 degrees.
 - c Unlock the rotate screw (Figure 25) and rotate the camera body up to 360 degrees.

Note:You must securely lock each screw to ensure that the camera holds the modified position.

- End -

Figure 25 Pan, tilt and rotate screws



Holis 4MP IR Dome cameras

This chapter provides general quick start guide information on the camera and installation procedures.

In the box

- 1 x Camera
- 1 x Quick Start Guide
- 4 x 4x25mm tapping screws
- 1 x Mounting template
- 4 x 6x25mm Plastic screw anchors
- 1 x Silicone plug
- 1 x L-Key Hexagonal wrench
- 1 x Regulatory Document

Installation tools

- Screwdriver
- Drill
- L-Key Hexagonal wrench

Figure 26 Camera parts

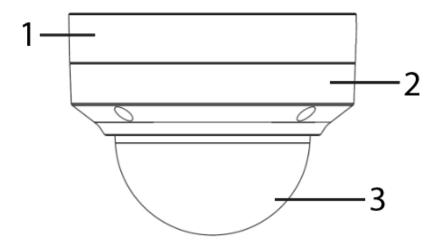


Table 27 Camera part descriptions

Number	Camera Part description
1	Camera base
2	Camera cover
3	Camera dome

Figure 28 Cable connections

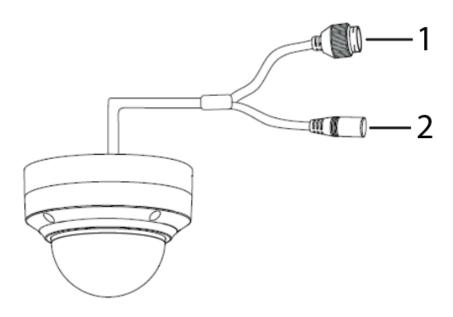
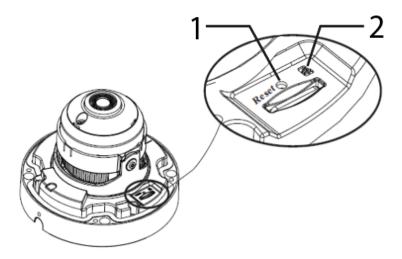


Table 29 Cable connections descriptions

Number	Cable connection description
1	Ethernet connector and also supports PoE
2	Power connector (12VDC @ 1A)

Figure 30 Micro SD card slot and reset button



Note:Remove the four screws on the camera cover (2) (Figure 26) to access the buttons. Securely attach the cover when finished.

Table 31 Micro SD card slot and reset button descriptions

Number	Camera button description
1	Micro SD card slot
2	Reset button (Hold for more than 3 seconds)

Quick reference

- Default IP: 192.168.1.168 (DHCP enabled).
- Default Username / Password: admin / admin
- Power: DC12V or PoE
- Use Internet Explorer 11 web browser.

Procedure 8 Mounting the camera to a wall or ceiling

Ensure that the wall or ceiling is strong enough to withstand three times the weight of the camera.

- 1 Place the mounting template on the surface that you want to attach the camera.
- 2 On the surface drill four Ø 4.6mm holes and cut out a cable hole as per the markings identified on the mounting template.
- 3 Securely place the four screw anchors into the four holes.
- 4 Remove the four screws on the camera cover (2) (Figure 26) to remove the cover from the camera base (1) (Figure 26).
- 5 Place the camera cable through the cable hole on the mounting surface.

OR

Use the cable side entry hole slot on the camera base.

Note:If you are not using the cable side entry slot then ensure that the cable side entry plug is inserted into the slot on the camera base.

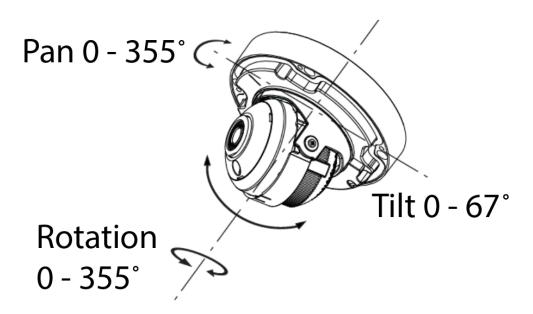
- Hold the camera base (1) (Figure 26) up to the mounting template and align the four holes on the camera base with the four holes on the mounting surface.
- Insert the four screws into the four holes on the camera base and securely attach the camera to the mounting surface.
- 8 Hold the camera base cover up to the camera base and align the four holes on the camera cover with the four holes on the camera base.
- Insert the screws into the four holes and securely attached the camera cover to the camera base.
- 10 To power up the camera:
 - Connect a 12V DC power supply to the power connector on the camera cable.

OR

 Connect a shielded PoE cable to the ethernet / PoE slot on the camera cable

- End -

Figure 32 Camera pan, tilt and rotate



Holis 2MP and 4MP IR Dome cameras

This chapter provides general quick start guide information on the camera and installation procedures.

In the box

- 1 x Camera
- 1 x Quick Start Guide
- 4 x PA 4x25mm tapping screws
- 1 x Mounting template
- 4 x 6x29mm Plastic screw anchors
- 1 x Sponge
- 1 x L-Key Hexagonal wrench
- 1 x CVBS & DC IN cables
- 1 x Regulatory Document

Installation tools

- Screwdriver
- Drill
- L-Key Hexagonal wrench

Figure 33 Camera parts

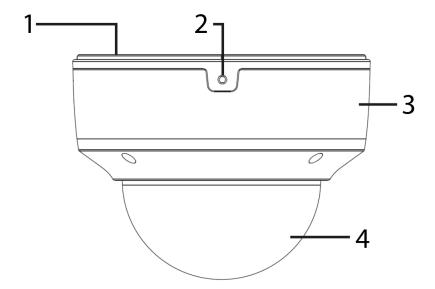


Table 34 Camera part descriptions

Number	Camera Part description
1	Camera base
2	Lock screw
3	Camera dome cover
4	Camera dome

Figure 35 Cable connections

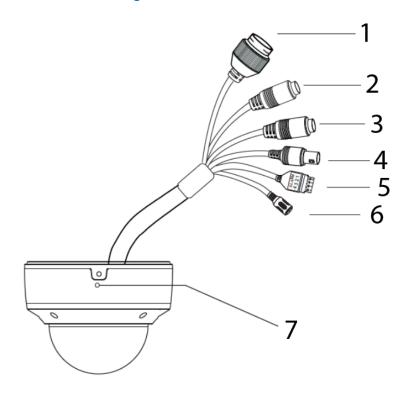
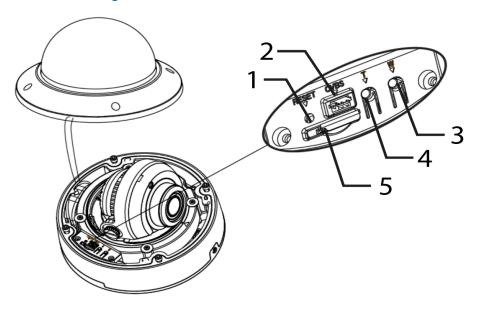


Table 36 Cable connections descriptions

Number	Cable connection description
1	Ethernet connector and also supports PoE
2	Audio Input (Mic)
3	Audio Output (HP)
4	CVBS Video Output
5	Alarm Input / Output
	• 1 – Alarm OUT COM
	• 2 - Alarm OUT Open
	• 3 – Alarm IN
	• 4 – Alarm IN GND
6	Power connector (12VDC @ 1A)
7	Microphone

Figure 37 Micro SD card slot and reset button



Note:Remove the four screws on the camera cover (3) (Figure 33) to access the buttons. Securely attach the cover when finished.

Table 38 Micro SD card slot and reset button descriptions

Number	Camera button description
1	Reset button (Hold for more than 3 seconds)
2	DC IN & CVBS Interface
3	Zoom -
4	Zoom +
5	Micro SD card slot

Quick reference

- Default IP: 192.168.1.168 (DHCP enabled).
- Default Username / Password: admin / admin
- Power: 12VDC or PoE 48VDC (2MP also supports 24V AC).
- Use Internet Explorer 11 web browser.

Procedure 9 Mounting the camera to a wall or ceiling

Ensure that the wall or ceiling is strong enough to withstand three times the weight of the camera.

- 1 Place the mounting template on the surface that you want to attach the camera.
- 2 On the surface drill four Ø 6mm holes and cut out a Ø 22mm cable hole as per the markings identified on the mounting template.
- 3 Securely place the four screw anchors into the four holes.
- 4 Remove the four screws on the camera cover (3) (Figure 33) and the fixing screw (2) (Figure 33) to remove the cover from the camera base.
- 5 Place the camera cable through the cable hole on the mounting surface.
- Align the four holes on the sponge (1) (Figure 39) with the four holes on the camera base (2) (Figure 39).

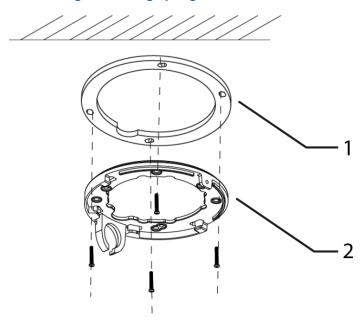


Figure 39 Ring sponge and camera base

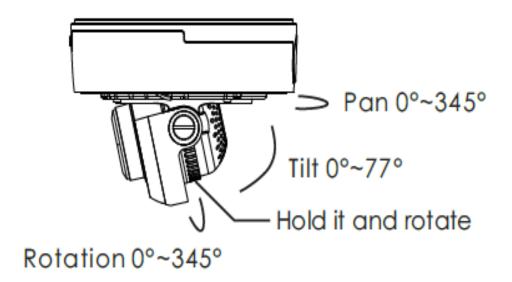
- Align the four holes on the sponge and camera base with the four holes on the mounting template.
- Insert the four screws into the four holes on the camera base and securely attach the sponger and camera base to the mounting surface
- 9 Hold the camera base cover up to the camera base and align the four holes on the camera cover with the four holes on the camera base.
- 10 Insert the screws into the four holes and securely attach the camera cover to the camera base.
- Insert the fixing screw (2) (Figure 33) into the hole on the camera base and securely attach it to the camera base.
- 12 To power up the camera:
 - Connect a 12V DC power supply to the power connector on the camera cable.

OR

 Connect a shielded PoE cable to the ethernet / PoE slot on the camera cable.

- End -

Figure 40 Camera pan, tilt and rotate



Network Topology

The Holis series cameras delives video images and audio in real-time using the internet and intranet. It is equipped with an Ethernet RJ-45 network interface.

The following images illustrate the network topologies of the cameras.

Holis 4MP IR Bullet and 2MP Motorized IR Bullet Cameras Topology Figure 41 Network Topology Type I

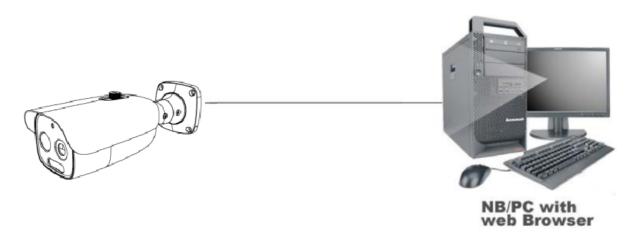
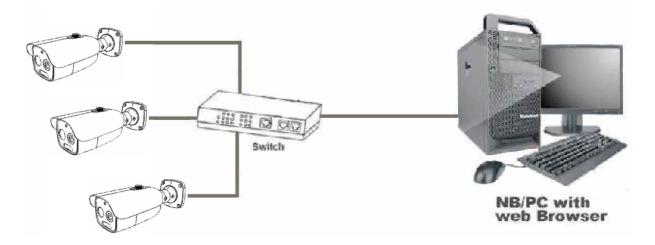


Figure 42 Network Topology Type II



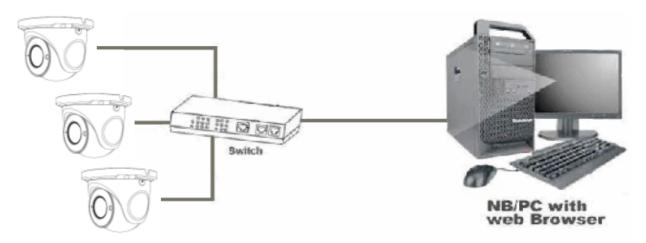
Note:Please check your server specification for camera connection limits.

Holis 4MP IR Turret Camera Topology

Figure 43 Network Topology Type I



Figure 44 Network Topology Type II

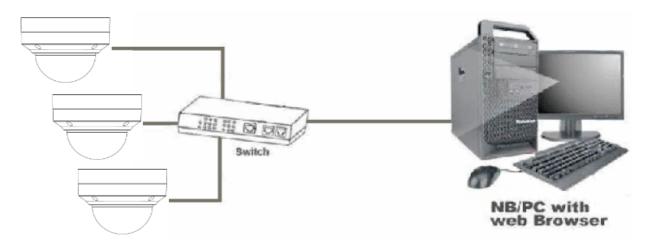


Note: Please check your server specification for camera connection limits.

Holis 4MP IR Vandal proof Dome cameras Topology Figure 45 Network Topology Type I



Figure 46 Network Topology Type II



Note: Please check your server specification for camera connection limits.

Holis 2MP and 4MP Motorized IR vandal proof Dome camera Topology Figure 47 Network Topology Type I

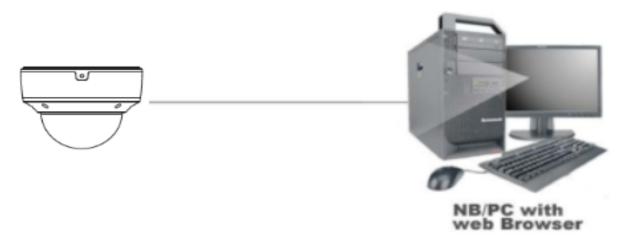
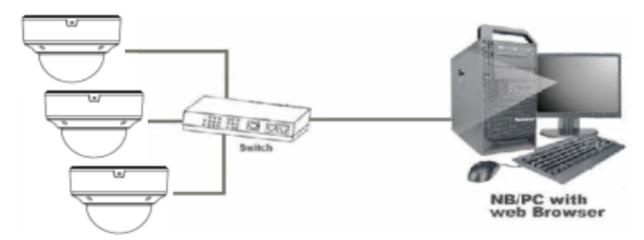


Figure 48 Network Topology Type II



Note: Please check your server specification for camera connection limits.

Network Connection

Default IP Address

Since this is a network-based unit, an IP address must be assigned at the very first bootup. The default IP address of the unit is 192.168.1.168 and sub mask is 255.255.255.0.

However, if you have a DHCP server in your network, the unit obtains an IP address automatically from the DHCP server so that you do not need to change the IP address of the camera.

Note:If you assign the camera a Static IP address prior to DHCP being enabled, the camera first reboots for approximately 30 seconds and then remains accessible at its Static IP until it connects to a DHCP server.

- Connect to a PC directly: Directly connect the camera to a PC using a standard Ethernet cable. This requires POE switch or injector.
- Connecting a camera to a Local Area Network (LAN): To add the camera to an existing LAN, connect the camera to the POE hub or switch on your network.

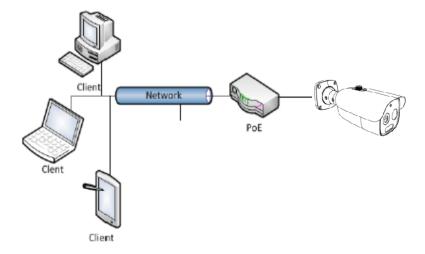


Figure 49 Network connection diagram

Default camera settings

The following table describes the default camera settings.

Network Settings	Defaults	
DHCP	Enabled	
Static IP Address	192.168.1.168	
Default Username	admin	
Default Password	admin	

Procedure 10 Connecting from a computer

- 1 Ensure the camera and your computer are in the same subnet.
- Check if the network is available between the unit and the computer by pinging the default IP address.
 - a Start a command prompt.
 - b Type "Ping 192.168.1.168". If the message "Reply from..." appears, it means the connection is available.
- 3 Start Internet Explorer and enter IP address: 192.168.1.168. A login window appears. In the window, enter the default user name: admin and password: admin to log in.

- End -

DHCP

On initial camera startup, and after a hardware factory reset, Dynamic Host Configuration Protocol (DHCP) is enabled by default and remains enabled until the camera receives either a DHCP address or is assigned a Static IP address.

Procedure 11 Configure the IPv4 settings

- 1 Select **Network** on the Web User Interface banner to view the **IPv4** tab.
- 2 Select the **Obtain an IP address automatically** option to automatically enable DHCP and disable manual settings.

Or

Select the **Use the following IP address** option to manually enter the settings.

- a Enter the IPv4 Address in the **IPv4 Address** text box in the form xxx.xxx.xxx.xxx. The default setting is '192.168.1.168'
- b Select the **Test** button to ensure that the IP address is correct.
- c Enter the Subnet Mask in the **Subnet Mask** text box xxx.xxx.xxx. The default setting is '255.255.255.0'
- d Enter the Gateway IP address in **Gateway** text box xxx.xxx.xxx.xxx.
- e Enter the Preferred DNS Server IP address in the Preferred DNS Server text box.
- f Enter the Alternate DNS Server IP address in the **AlternateDNS Server** text box.
- 3 Select the **Save** button to save the settings.

- End -

Procedure 12 Connecting to the camera using the static IP address

- The camera attempts to obtain an IP Address from the DHCP Server. When no DHCP Server is available the camera is assigned a Static IP address of 192.168.1.168.
- Open Microsoft Internet Explorer and enter the URL of the camera as 192.168.1.168. The camera sign in page displays.

Note: The computer you use to configure the camera must have an IP address on the same subnet.

- End -

Procedure 13 Logging on to the camera web user interface

- When you select the camera, the sign in page displays. Select your preferred language from the drop-down menu.
- 2 Enter the username in the **Username** text box. The default username is admin.
- 3 Enter the password in the **Password** text box. The default password is admin.
- 4 Select Log in.
- 5 The Live view page is visible. This displays the current view of the camera.

- End -

Live View

After logging in, the following window will be shown.

Figure 50 Live View menu

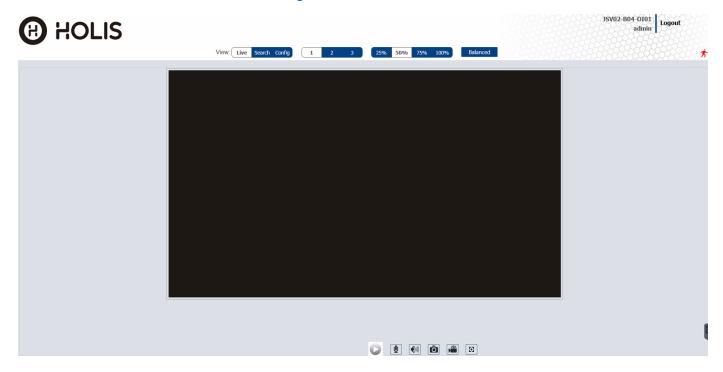


Table 51 Live view menu icons and descriptions

lcon	Description	Icon	Description	
	Play	€	Color abnormal indicator	
	Stop	•	Abnormal clarity indicator	
U	Start / stop two-way audio	8	Scene change indicator	
	Enable/disable audio	8	Intrusion indicator	
Ô	Snapshot	~	Region entrance indicator	
	Start / stop local recording		Region exiting indicator	
•	AZ control (only available for the model with motorized zoom lens)		Face detection indicator	
27	Face Detection	<u>~</u>	Target counting indicator	
	SD card recording indicator	((0))	Sensor alarm indicator	

Note: The smart alarm indicators flash only when the camera supports those functions and the corresponding events are enabled.

Search

You can search for images and recording clips within a specific time and date

Figure 52 Search menu



Procedure 14 Searching for images locally

- 1 Select the **Search** button.
- 2 Select the **Record** drop-down menu and select Picture.
- 3 Select the **SD Card** drop-down menu and select Local.
- 4 Select a date in the calendar.
- 5 Select the first text box under the calendar and enter a start time.
- 6 Select the second text box under the calendar and enter a finish time.
- 7 Select the search icon to view a list of the images.
- 8 Double click a file name in the list to view the captured images.
- 9 Select the icon to return to the previous interface.

Note: See Table 53 for a list of options available once you have located an image.

- End -

Procedure 15 Searching for images on the SD card

1 Select the **Search** button.

- 2 Select the **Record** drop-down menu and select Picture.
- 3 Select the **SD Card** drop-down menu and select SD Card.
- 4 Select a date in the calendar.
- 5 Select the first text box under the calendar and enter a start time.
- 6 Select the second text box under the calendar and enter a finish time.
- 7 Select the search icon to view a list of the recordings.
- 8 Double click a file name in the list to view the captured images.
- 9 Select the icon to return to the previous interface.

Note: See Table 53 for a list of options available once you have located an image.

- End -

Table 53 Options available after you locate an image

Icon	Description	Icon	Description	
	Close: Select an image and click this button to close the image.		Close all: Click this button to close all images.	
T T	Save: Click this button to select the path for saving the image on the PC.	(+)	Save all: Click this button to select the path for saving all pictures on the PC.	
<u>▶ 1:1</u> ◀	Fit size: Click to fit the image on the screen.	$\boxed{\times_1}$	Actual size: Click this button to display the actual size of the image.	
(+)	Zoom in: Click this button to digitally zoom in.		Zoom out: Click this button to digitally zoom out.	
	Slide show play: Click this button to start the slide show mode.		Stop: Click this button to stop the slide show.	
• 5.5S	Play speed: Play speed of the slide show.			

Procedure 16 Searching for recordings locally

- 1 Select the **Search** button.
- 2 Select the **Record** drop-down menu and select Record.
- 3 Select the **SD Card** drop-down menu and select Local.
- 4 Select a date in the calendar.
- 5 Select the first text box under the calendar and enter a start time.
- 6 Select the second text box under the calendar and enter a finish time.
- 7 Select the search icon to view a list of recordings.
- 8 Double click a file name to play the recording.
- 9 Select the icon to return to the previous interface.

Note:See Table 54 for a list of options available once you have located a recording.

- End -

Table 54 Options available after you locate a recording

Icon	Description	Icon	Description
	Play button. After pausing the video, click this button to continue playing.		Pause button
	Stop button	¥	Speed down
	Speed up		Watermark display
	Enable / disable audio; drag the slider to adjust the volume after enabling audio.		

Procedure 17 Searching for recordings on the SD card

- 1 Select the **Search** button.
- 2 Select the **Record** drop-down menu and select Record.
- 3 Select the **Local** drop-down menu and select SD Card.
- 4 Select a date in the calendar.
- 5 Select the first text box under the calendar and enter a start time.
- 6 Select the second text box under the calendar and enter a finish time.
- 7 Select the **Alarm** check box at the bottom of the interface.
- 8 Select mix stream (video and audio stream) or video stream as needed.
- 9 Double click a file name in the list to view the captured recordings.
- 10 Select the icon to return to the previous interface.

Note:See Table 54 for a list of options available once you have located a recording.

Note:The time table can be shown in 24H/12H/2H/1H format by clicking the corresponding buttons.

- End -

Procedure 18 Downloading a video clip

- 1 Search for the recording as per Procedure 14 or Procedure 15.
- 2 Select the start time by clicking on the overall recording time line.
- 3 Select the icon to set the start time.
- 4 Select the end time by clicking on the overall recording time line.
- 5 Select the icon to to set the end time.

- 6 Select the icon to download the video file in the PC.
 - Select the **Set up** button to set the storage directory of the video files.
 - Select the **Open** button to play the video.
 - Select the Clear List button to clear the downloading list.
 - Select the **Close** button to close the downloading window.

- End -

Configuration

The following sections explain how you can configure the Holis cameras using the Web User Interface.

Accessing the camera Web User Interface

Use the following procedure to access the camera Web User Interface. Use Internet Explorer 11 web browser.

Procedure 19 Logging in to the Camera

- 1 Refer to Network Connection on page 37 for details on how to connect the camera to your network or computer.
- When you select the camera, the sign in page displays.
- 3 Select your preferred language from the drop-down menu. The default language is English.
- 4 Enter the default username and password when prompted Username: admin, Password: admin.
- 5 Click **Log in**. The camera Web User Interface displays. The first time that you log into the camera you are prompted to change the password.
- Once the above steps are complete, the Live view page is visible. This displays the current view of the camera.

- End -

Changing the Camera Web User Interface Language

Use the following procedure to change the language used in the camera Web User Interface.

Procedure 20 Change the Camera Web User Interface Language

- Open the camera sign in page. If you are already logged in to the Web User Interface, select **Log Off** to display the sign in page.
- 2 Select your preferred language from the drop-down menu:
 - English
 - Chinese (Simplified)
 - · Chinese (Traditional)
 - Japanese
 - Korean

The default language is English.

- 3 Enter the Username.
- 4 Enter the Password.
- 5 Select Log in.

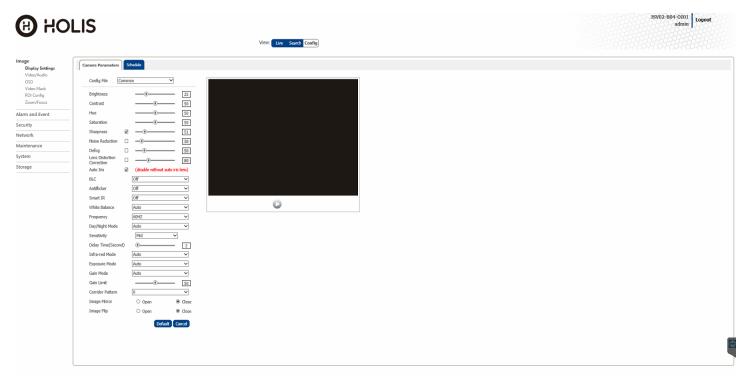
The camera web User Interface displays in the selected language.

- End -

Image

In this section you can configure the display settings, video and audio, on-screen display, video mask and regions of interest.

Figure 55 Image settings menu page



Display Settings

In this section you can adjust the camera parameter settings and schedule image parameters settings.

Procedure 21 Adjusting the camera parameters

- 1 Select **Image** on the Web User Interface banner to view the **Camera Parameters** tab.
- 2 Select the **Config File** drop-down menu and select one of the following:
 - Common
 - Day
 - Night
- Adjust the slide-bar to select a value for the options in the list below:
 - Brightness: Set the brightness level of the camera's image.
 - **Contrast:** Set the color difference between the brightest and darkest parts.
 - Hue: Set the total color degree of the image.

- **Saturation:** Set the degree of color purity. The purer the color, the brighter the image is.
- Sharpness: Select the Sharpness check box and then set the resolution level of the image plane and the sharpness level of the image edge.
- Noise Reduction: Select the Noise Reduction check box and set the noise reduction value. Decrease the noise and make the image more thorough. Increasing the value will make the noise reduction effect better but it will reduce the image resolution.
- Defog: Select the Defog check box and set the defog value. Activating this function and setting an appropriate value as needed in foggy, dusty, smoggy or rainy environment to get clear images.
- 4 Select an option from the drop-down menu for each of the following:
 - · Backlight Compensation (BLC):

Off: disables the backlight compensation function. It is the default mode.

HWDR: WDR can adjust the camera to provide a better image when there are both very bright and very dark areas simultaneously in the field of the view by lowering the brightness of the bright area and increasing the brightness of the dark area. Recording will be stopped for a few seconds while the mode is changing from non-WDR to WDR mode.

HLC: lowers the brightness of the entire image by suppressing the brightness of the image's bright area and reducing the size of the halo area.

BLC: If enabled, the auto exposure will activate according to the scene so that the object of the image in the darkest area will be seen clearly.

· Antiflicker:

Off: disables the anti-flicker function. This is used mostly in outdoor installations.

50Hz: reduces flicker in 50Hz lighting conditions.

60Hz: reduces flicker in 60Hz lighting conditions.

- Smart IR: Choose "ON" or "OFF". This function can effectively avoid image overexposure and underexposure by controlling the brightness of the IR lights according to the actual conditions to make the image more realistic. Please enable it as needed.
- White Balance: Adjust the color temperature according to the environment automatically.
- Frequency: 50Hz and 60Hz can be optional.
- Day/Night Mode: Choose "Auto", "Day", "Night" or "Timing".
- Infra-red Mode: "On" or "Off".
- Gain Mode: Choose "Auto" or "Manual". If "Auto" is selected, the gain
 value will be automatically adjusted according to the actual situation. If
 "Manual" is selected, the gain value shall be set manually. The higher
 the value is, the brighter the image is.
- **Gain Limit:** Adjust the slide-bar to increase or decrease the value.

Note: To restore the settings to their default value then select the **Default** button.

Note: Select Cancel to undo any changes.

- End -

Procedure 22 Scheduling when certain camera parameters should be used

- 1 Select Image on the Web User Interface banner to view the Camera Parameters tabs.
- 2 Select the **Schedule** tab to view the schedule menu.
- 3 Select the **Schedule** drop-down menu and one of the following:
 - Full Time for common, day, night mode
 - Timing to enter a time.

Note:When Timing is selected then you must click and drag the **Timing Range** slide-bar to enter the time.

- 4 Select the **Config File** drop-down menu and select one of the following:
 - Common
 - Day
 - Night
 - Auto
- 5 Select the **Save** button to save the settings.

- End -

Video / Audio

In this section you can set the video and audio settings.

Procedure 23 Configuring the video settings

Four video streams can be adjusted at the same time.

- Select Image on the Web User Interface banner to view the Video / Audio option in the menu list.
- 2 Select **Video / Audio** to view the **Video** tab to view the video menu.
- 3 Select the **Resolution** drop-down menu and select the size of the image.
- 4 Select the **Frame Rate** text box to enter a value for the frame rate.
- 5 Select the **Bitrate Type** drop-down menu and select one of the following:
 - CBR no matter how much change is seen in the video scene, the compression bitrate will be kept constant.
 - VBR the compression bitrate will be adjusted according to scene changes. For example, for scenes that do not have much movement, the bitrate will be kept at a lower value. This can help optimize the network bandwidth usage.
- 6 Select the **Bitrate(Kbps)** drop-down menu and select an option.

Note: This option is only available when CBR is selected in step 5.

7 Select the Video Quality drop-down menu and select an option. The higher the image quality then more bitrate will be required.

Note: This option is only available when VBR is selected in step 5.

8 Select the I Frame Interval text box to enter a value for the I frame.

Note:I frame determines how many frames are allowed between a "group of pictures". When a new scene begins in a video, until that scene ends, the entire group of frames (or pictures) can be considered as a group of pictures. If there is not much movement in the scene, setting the value higher than the frame rate is fine, potentially resulting in less bandwidth usage. However, if the value is set too high, and there is a high frequency of movement in the video, there is a risk of frame skipping.

9 Select the Video Compression drop-down menu to select the video compression type.

Note: H264, H265, and MJPEG are optional.

Note:If H.265 is chosen, make sure the client system is able to decode H.265

- Select the **Profile** drop-down menu to select the profile type. For H.264. Baseline, main and high profiles are selectable.
- Select the **Send Snapshot** drop-down menu to select the number of snapshots to generate for an event.
- Select the **Video encode slice split** check box to ensure a smooth image even when using the low-performance computer.
- 13 Select the **Watermark** check box to enable this option when playing the local recorded video in the search interface.
- 14 Select the **Watermark** content text box and enter a description.
- 15 Select the **Save** button to save the settings.

- End

Procedure 24 Configuring the audio settings

This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras.

- Select Image on the Web User Interface banner to view the Video / Audio option in the menu list.
- Select the Video / Audio option and then the Audio tab to view the audio menu.
- 3 Select the **Enable** check box to enable audio.
- 4 Select the Audio Encoding drop-down menu and select one the following:
 - G711A
 - G711U
- 5 Select the **Audio Type** drop-down menu and select the following:
 - LIN
- 6 Select the **Speaker** drop-down menu and select the following:

Warning

When "Talkback" is selected, the external audio output device will be used to output sound for two-way talk. When "Warning" is selected, the external audio output device will be used to output the pre-defined audio alarm.

7 Select the **Speaker** drop-down menu and select the following:

Warning

When "Talkback" is selected, the built-in speaker will be used to output sound for two-way talk. When "Warning" is selected, the built-in speaker will be used to output the pre-defined audio alarm.

8 Select the **Save** button to save the settings.

- End -

On Screen Display (OSD)

In this section you can select the date format, enter a device name, add OSD content and picture overlap here. After enabling the corresponding display and entering the content you can drag them to change their position.

Procedure 25 Settings up on screen display

You can add the date, time and device name to the on screen display.

- Select Image on the Web User Interface banner to view the OSD option in the menu list.
- 2 Select the **OSD** option to view the OSD menu.
- 3 Select the **Date Format** drop-down menu and select a date format.
- 4 Select the **Show Timestamp** check box to view the date on screen.
- 5 Select the **Device Name** text box and enter the name of the device.
- 6 Select the **Show Device Name** check box to view the device name on screen.

Note:You can move the on screen display around the screen. Click and hold the on screen display to move it around the screen.

7 Select the **Save** button to save the settings.

- End -

Procedure 26 Uploading the on screen display settings

- Select Image on the Web User Interface banner to view the OSD option in the menu list.
- 2 Select the **OSD** option to view the OSD menu.
- 3 Select the **OSD Content 1** check box drop-down menu and select **Picture Overlay** from the drop down menu.
- 4 Select Browse to select the overlap picture and then select **Upload** to upload the overlap picture.

Note: The pixel of the image shall not exceed 200*200, or it cannot be uploaded.

5 Select the **Save** button to save the settings.

- End -

Video Mask

A maximum of four video masks can be setup.

Procedure 27 Adding a video mask

- Select **Image** on the Web User Interface banner to view the **View Mask** option in the menu list.
- 2 Select the **Video Mask** option to view the **Video Mask** menu.
- 3 Select the **Enable** check box to enable a video mask.
- 4 Select the **Draw Area** button and then drag the mouse over the video and draw the video mask.

Note:Select the **Clear** button to remove the video mask.

5 Select the **Save** button to save the settings.

- End -

Region of Interest (ROI) Configuration

An area in the image can be set as a region of interest. This area will have a higher bitrate than the rest of the image, resulting in better image quality for the identified area.

Procedure 28 Adding a region of interest

- Select Image on the Web User Interface banner to view the ROI Config option in the menu list.
- 2 Select the ROI Config option to view the ROI menu.
- 3 Select the **Enable** check box to enable a region of interest
- 4 Select the **Draw Area** button and then drag the mouse over the video and draw the region of interest.

Note: Select the Clear button to remove the video mask.

- 5 Adjust the **Level** slide-bar to set the region of interst level on screen.
- 6 Select the **Save** button to save the settings.

- End -

Zoom / Focus

The setting lets you zoom in, zoom out and focus the camera lens. This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras.

Procedure 29 Zooming in an out on the camera

- 1 Select **Image** on the Web User Interface banner to view the **ROI Config** option in the menu list
- 2 Select the **Zoom/Focus** option to view the Zoom/Focus menu.

- End -

Alarm and Event

In this section you can configure motion detection, an SD card, alarm in and out, the alarm server, audio alarm, light alarm, set the camera to detect changes in the surveillance environment affected by the external factors, the sensitivity the system responds to the amplitude of the scene change, trigger alarms and set areas of interest.

Figure 56 Alarm and Event settings menu page



Motion Detection

Procedure 30 Configuring a motion detection alarm

Four video streams can be adjusted at the same time.

- 1 Select **Alarm and Event** on the Web User Interface banner to view the **Motion** tab.
- 2 Select the **Enable** check box to activate motion based alarms.

Note:If unchecked, the camera will not send out any signals to trigger motion-based recording to the NVR or CMS, even if there is motion in the video.

- 3 Select the **Alarm Holding Time** drop-down menu and select an option.
- 4 Select the following check boxes to enable that alarm:
 - Alarm Out:If selected, this would trigger an external relay output that is connected to the camera on detecting a motion based alarm.
 - **Trigger Audio Alarm:** If selected, the warning voice will be uttered on detecting a motion based alarm. (Please set the warning voice first. See Audio Alarm for details).

- **Trigger Snap:** If selected, the system will capture images on motion detection and save the images on an SD card.
- Trigger SD Recording: If selected, video will be recorded on an SD card on motion detection.
- Trigger Email: If "Trigger Email" and "Attach Picture" are selected (email address must be set first in the Email configuration interface), the captured pictures and triggered event will be sent into those addresses.
- Trigger FTP: If selected, the captured pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.
- 5 Select the **Save** button to save the settings.

- End -

Procedure 31 Select the motion detection area and sensitivity

- Select Alarm and Event on the Web User Interface banner to view the Motion tab.
- 2 Select the Area and Sensitivity tab.
- Move the **Sensitivity** slide-bar to set the sensitivity. A higher sensitivity value means that motion will be triggered more easily.
- 4 Select **Add** and then select the **Draw Area** button.
- 5 Click and drag the mouse over the screen to draw the motion detection area.

Note:Select the **Clear All** button and then click and drag the mouse over the screen to erase the motion detection area.

Note: Select the Select All button to select the full drawing.

Note: Select the Invert button to invert the drawing.

6 Select the **Save** button to save the settings.

- End -

Procedure 32 Adding a weekly motion detection alarm schedule

You can set the alarm time from Monday to Sunday for a single week. Each day is divided in one hour increments. Blue in Figure 22 means scheduled. No colour means that its unscheduled. See Figure 57.

Motion Area and Sensitivity Schedule ○ Erase

Add Week Schedule Sun. 00:00-24:00 Mon. Tue. 10 11 12 13 14 15 16 17 18 19 20 Wed. 11 12 13 Thu. 00:00-24:00 Fri. 22 Sat. 00:00-24:00 Manual Input Holiday Schedule Date 01-15 Add Delete 00:00-24:00

Figure 57 Schedule tab

- 1 Select **Alarm and Event** on the Web User Interface banner to view the **Motion** tab.
- 2 Select the **Schedule** tab.
- 3 Select **Add** for any day to schedule the temperature measurement and then click and drag the mouse over the timeline to set the time.

Or

Select **Manual Input** for any day to select a specific start and end time. This adds more granularities (minutes).

Note:Select **Erase** for any day to delete the schedule in step 3 and then click and drag the mouse over the timeline to erase the time.

4 Select the **Save** button to save the settings.

- End -

Procedure 33 Adding a daily motion detection alarm schedule

You can set the alarm time for a special day, such as a holiday. See Figure 57.

- 1 Select **Alarm and Event** on the Web User Interface banner to view the **Motion** tab.
- 2 Select the **Schedule** tab.
- 3 Select the **Date** text box and enter a date.

4 Select **Add** for any day to schedule the temperature measurement and then click and drag the mouse over the timeline to set the time.

Or

Select **Manual Input** for any day to select a specific start and end time. This adds more granularities (minutes).

Note:Select **Erase** for any day to delete the schedule in step 3 and then click and drag the mouse over the timeline to erase the time.

5 Select the **Save** button to save the settings.

- End -

Anomaly

In this section you can take an action, such as triggering an alarm, if the SD card is full, has an error or if the camera experiences some error such as the IP collision or cable disconnection.

Procedure 34 Enable an alarm when the SD Card is full

- 1 Select **Alarm and Event** on the Web User Interface banner and then select **Anomaly**.
- 2 Select the **Enable** check box.
- 3 Select the **Alarm Holding Time** drop-down menu and select a time.
- 4 Select one of the following check boxes to trigger the alarm:
 - Alarm Out: If enabled, the alarm output device will be triggered when detecting abnormal temperature.
 - Trigger Email: If Trigger Email and Attach Picture are checked (email address must be set first in the Email configuration interface), the captured pictures and triggered event will be sent into those addresses.
 - Trigger FTP: If Trigger FTP is checked, the captured pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.
- 5 Select the **Save** button to save the settings.

- End -

Procedure 35 Enable an SD Card Error alarm

- Select Alarm and Event on the Web User Interface banner and then select Anomaly.
- 2 Select the SD Card Error tab.
- 3 Select the **Enable** check box.
- 4 Select the **Alarm Holding Time** drop-down menu and select a time.
- 5 Select one of the following check boxes to trigger the alarm:
 - **Alarm Out:** If enabled, the alarm output device will be triggered when detecting abnormal temperature.
 - **Trigger Email:** If Trigger Email and Attach Picture are checked (email address must be set first in the Email configuration interface), the captured pictures and triggered event will be sent into those addresses.

- Trigger FTP: If Trigger FTP is checked, the captured pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.
- 6 Select the **Save** button to save the settings.

- End -

Procedure 36 Enable an IP Address Collision alarm

This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras.

- 1 Select **Alarm and Event** on the Web User Interface banner and then select **Anomaly**.
- 2 Select the IP Address Collision tab.
- 3 Select the **Enable** check box.
- 4 Select the **Alarm Holding Time** drop-down menu and select a time.
- 5 Select the following check box to trigger the alarm.
 - Alarm Out: If enabled, the alarm output device will be triggered when detecting abnormal temperature.
- 6 Select the **Save** button to save the settings.

- End -

Procedure 37 Enable an alarm when a cable is disconnected

This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras.

- Select Alarm and Event on the Web User Interface banner and then select Anomaly.
- 2 Select the Cable Disconnected tab.
- 3 Select the **Enable** check box.
- 4 Select the **Alarm Holding Time** drop-down menu and select a time.
- 5 Select the following check box to trigger the alarm.
 - Alarm Out: If enabled, the alarm output device will be triggered when detecting abnormal temperature.
- 6 Select the **Save** button to save the settings.

- End -

Alarm In

This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras.

Procedure 38 Enable an Alarm In alarm.

- Select Alarm and Event on the Web User Interface banner and then select Alarm In.
- 2 Select the **Enable** check box.
- 3 Select the **Alarm Type** drop-down menu and select an option.
- 4 Select the **Alarm Holding Time** drop-down menu and select an option.
- 5 Select the **Sensor Name** text box and enter a name.
- 6 Select the following check boxes to trigger that alarm:
 - Alarm Out: If enabled, the alarm output device will be triggered when detecting abnormal temperature.
 - Trigger Audio Alarm: If enabled, the warning voice will be triggered when the temperature exceeds the set value. (Please set the warning voice first. See Audio Alarm for details)
 - Trigger Light Alarm: If enabled, the light of the camera will flash when the temperature exceeds the set value. (Please set the light flashing time and frequency first. See Light Alarm for details)
 - Trigger SD Snap: If enabled, the system will capture images on detecting abnormal temperature alarm and save the images on an SD card.
 - **Trigger SD Recording:** If selected, video will be recorded on an SD card on detecting abnormal temperature alarm.
 - Trigger Email: If "Trigger Email" and "Attach Picture" are checked (email address must be set first in the Email configuration interface), the captured pictures and triggered event will be sent into those addresses.
 - Trigger FTP: If "Trigger FTP" is checked, the captured pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.
- 7 Select the Save button to save the settings.

- End -

Procedure 39 Schedule an Alarm in alarm

This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras.

- 1 Select **Alarm and Event** on the Web User Interface banner and then select **Alarm In**.
- 2 Select the **Schedule** tab.
- 3 See Procedures 32 and 33 for assistance with scheduling an event / alarm.

- End -

Alarm Out

This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras.

Procedure 40 Enable an Alarm Out alarm

- 1 Select Alarm and Event on the Web User Interface banner and then select Alarm Out.
- 2 Select one of the following from the **Alarm Out Mode** drop down menu:
 - Alarm Linkage: When selected, enter the Alarm Out Name, and select the Alarm Holding Time and Alarm Type from the drop-down menus.
 - Manual Operation: When selected, select the Alarm Type from the drop-down menu and select Open to immediately trigger the alarm.
 Select Close to stop the alarm.
 - Day/Night Switch Linkage: When selected, select the Alarm Type and then choose to open or close alarm out when the camera switches to Day mode or Night mode from the drop-down menus.
 - Timing: When selected, select the Alarm Type from the drop-down menu, select Add and then click and drag the mouse on the timeline to set the schedule of the alarm out. Select Erase and drag the mouse on the timeline to erase the set time schedule.
- 3 Select the **Save** button to save the settings.

- End -

Alarm Server

Procedure 41 Configure the alarm server.

- 1 Select Alarm and Event on the Web User Interface banner and then select Alarm Server.
- 2 Select the **Server Address** text box and enter the server address.
- 3 Select the **Port** text box and enter the port number.
- 4 Select the **Heartbeat** drop-down menu and select an option.
- 5 Select the **Heartbeat Interval** and enter a number.
- 6 Select the **OK** button to save the settings.

- End -

Security

In this section you can add, delete and modify users and assign them permissions. You can see who is using the camera. An administrator can remove all the other users (including other administrators). An administrator can block a user and or give them access to the camera.

In order to prevent against malicious password unlocking, the 'locking once illegal login' function can be enabled. If this function is enabled, then after six unsuccessful login attempts the login interface locks. The camera can be logged in again after a half hour or after the camera reboots.

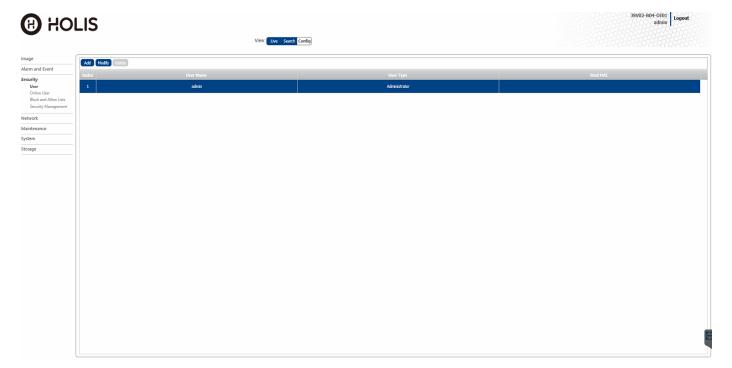


Figure 58 Security setting menu page

User

You can add, modify and delete users and assign them permissions.

Procedure 42 Adding a user

- 1 Select **Security** on the Web User Interface banner to view the **Users** menu.
- 2 Select the Add button.
- 3 Select the **User Name** text box and enter a name.
- 4 Select the **Password** text box and enter a password that meets the password criteria.
- 5 Select the **Confirm Password** text box and re-enter the password.
- 6 Select the **User Type** drop-down menu and select one of the following:
 - · Administrator: User has all permissions.
 - Normal User: User can only view the live video.

- Advanced User: User has the same permissions as an Administrator except for; user, backup settings, factory reset, and upgrading the firmware.
- 7 Select the Bind MAC check box and enter the MAC Address.

When this option is enabled, only the PC with the specified MAC address can access the camera for that user.

8 Select the **OK** button to save the settings.

- End -

Procedure 43 Modifying a user

- Select Security on the Web User Interface banner to view the Users menu.
- 2 Select the user that you want to modify and then select the **Modify** button.
- 3 Select the **Modify Password** check box.
- 4 Select the **Old Password** text box and enter a password that meets the password criteria.
- 5 Select the **New Password** text box and re-enter the password.
- 6 Select the **Confirm Password** text box and re-enter the password
- 7 Optional Select the **Bind MAC** check box and enter the MAC Address.

When this option is enabled, only the PC with the specified MAC address can access the camera for that user.

8 Select the **OK** button to save the settings.

Note:To change the access level of a user, the user must be deleted and added again with the new access level.

- End -

Procedure 44 Deleting a user

- 1 Select **Security** on the Web User Interface banner to view the **Users** menu.
- 2 Select the user that you want to delete and then select the **Delete** button.

Note: The default administrator account cannot be deleted.

- End -

Online User

You can see who is using the camera. An administrator can remove all the other users (including other administrators).

Procedure 45 Viewing a list of current users and removing them

1 Select **Security** on the Web User Interface banner and then select **Online User** from the menu list.

Note: A list of all online users is now visible.

2 Select the **Kick-off** button for any user to remove them.

- End -

Block and Allow lists

An administrator can block a user and or give them access to the camera.

Procedure 46 Blocking or enabling a user access

- Select Security on the Web User Interface banner and then select Block and Allow from the menu list.
- 2 Select the Enable address filtering check box.
- 3 Select the **Block the following address** option to block the user.

Or

Select the Allow the following address option to allow the user access.

- 4 Select one of the following options:
 - IPv4
 - IPv6
 - MAC
- 5 Select the text box and enter the **IP address** or **MAC address** and then select the **Save** button to save the settings.

- End -

Security Management

In order to prevent against malicious password unlocking, the 'locking once illegal login' function can be enabled. If this function is enabled, after six unsuccessful login attempts the the login interface locks. The camera can be logged in again after a half hour or after the camera reboots.

Procedure 47 Enable screen lock after six unsuccessful login attempts

- Select **Security** on the Web User Interface banner and then select **Security Management** from the menu list to view the **Security Service** tab.
- Select the Enable "locking once illegal login" function check box.
- 3 Select the **Save** button to save the settings.

- End -

Procedure 48 Setting specific password criteria

- Select **Security** on the Web User Interface banner and then select **Security Management** from the menu list.
- 2 Select the **Password Security** tab.
- 3 Select the Password Level drop-down menu and select one of the following:

- Medium Level: 9~15 characters, including at least two of the following categories: numbers, special characters, upper case letters, lower case letters.
- **Strong Level:** 9~15 characters. Numbers, special characters, upper case letters and lower case letters must be included.

Note:For your account security, it is recommended to set a strong password and change your password regularly.

- 4 Select the **Expiration Time** drop-down menu and select an password expiration time.
- 5 Select the **Save** button to save the settings.

- End

Procedure 49 Set the user automatic logout time

A user can be automatically logged out of the GUI when no activity is detected.

- Select Security on the Web User Interface banner and then select Security Management from the menu list.
- 2 Select the Logout time tab.
- 3 Select the **Expiration Time** check box to enable or disable the logout time.
- Adjust the slider-bar to enter the number of seconds when a user should be automatically logged out when no activity is detected.
- 5 Select the **Save** button to save the settings.

- End -

Network

In this section you can configure the IPv4, IPv6 and PPPoE settings on the camera. If PPPoE is used to connect to the internet, the camera receives a dynamic WAN IP address. This IP address changes frequently. To be notified, the IP change notification function can be used.

You can also configure settings for the ports, server, DDNS, 802.1x, RTSP, UPnP, Email, FTP, HTTPS, Spvmn and Quality of Service (QoS).

Word Table Control (1985)

Word Table Control (1

Figure 59 Network settings menu page

TCP/IP

In this section you can configure the IPv4 and IPv6 settings on the camera.

Procedure 50 Configure the IPv4 settings

- 1 Select **Network** on the Web User Interface banner to view the **IPv4** tab.
- 2 Select the **Obtain an IP address automatically** option to automatically enable DHCP and disable manual settings.

Or

Select the **Use the following IP address** option to manually enter the settings.

- a Enter the IPv4 Address in the **IPv4 Address** text box in the form xxx.xxx.xxx. The default setting is '192.168.1.168'
- b Select the **Test** button to ensure that the IP address is correct.
- c Enter the Subnet Mask in the **Subnet Mask** text box xxx.xxx.xxx. The default setting is '255.255.255.0'
- d Enter the Gateway IP address in **Gateway** text box xxx.xxx.xxx.xxx.
- e Enter the Preferred DNS Server IP address in the Preferred DNS Server text box.

- f Enter the Alternate DNS Server IP address in the Alternate DNS Server text box.
- 3 Select the **Save** button to save the settings.

- End -

Procedure 51 Configure the IPv6 settings

- 1 Select **Network** on the Web User Interface banner to view the **IPv4** tab.
- 1 Select the **IPv6** tab.
- 2 Select the **Obtain an IP address automatically** option to automatically enable DHCP and disable manual settings.

Or

Select the **Use the following IP address** option to manually enter the settings.

- a Select the IP Address text box and enter the IP address.
- b Select the Subnet Prefix Length text box and enter a value.
- c Select the **Gateway** text box and enter the Gateway number.
- 3 Select the **Save** button to save the settings.

- End -

Procedure 52 Configure the IP Change Notification Config settings

- 1 Select **Network** on the Web User Interface banner to view the **IPv4** tab.
- 2 Select the IP Change Notification Config tab.
- 3 Select the **Trigger Email** check box so that when the IP address of the device is changed, the new IP address is sent to the email address that has been set up.

Or

Select the **Trigger FTP** check box so that when the IP address of the device is changed, the new IP address is sent to FTP server that has been set up.

4 Select the **Save** button to save the settings.

- End -

Ports

In this section you can configure the ports.

Procedure 53 Configuring the HTTP, HTTPS, Data and RTSP ports

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- Select the HTTP Port text box and a number. The default HTTP port is 80. It can be changed to any port which is not occupied.
- 3 Select the **HTTPS Port** text box and a number. The default HTTPs port is 443. It can be changed to any port which is not occupied.
- 4 Select the **Data Port** text box and a number. The default data port is 9008. Please change it as necessary.

- 5 Select the **RTSP Port** text box and a number. The default port is 554. Please change it as necessary.
- 6 Select the **Persistent connection Port** text box and a number.
- 7 Select the Save button to save the settings.

- End -

Server

This function is mainly used for connecting to a network video management system.

Procedure 54 Connecting to a video management system

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the Server tab.
- 3 Select the **Enable** check box to enable servere configuration.
- 4 Select the **Server Port** text box and enter ther server port number
- 5 Select the **Server Address** text box and enter the server address number.
- 6 Select the **Device ID** text box and enter the Server ID number.
- 7 Select the **Save** button to save the settings.

- End -

DDNS

Dynamic DNS is supported for updating, in real time a changing IP address on the Internet to provide a persistent domain name for a resource that may change location on the network. RFC 2136 Dynamic Updates in the Domain Name System. In this situation the camera talks only to the DHCP server and the DHCP server is responsible for updating the DNS server. The camera sends its hostname to the DHCP server when requesting a new lease and the DHCP server updates the DNS records accordingly. This is suitable for an intranet style configuration where there is an internal DHCP and DNS service and the user wants only to access their camera within their own network. By default, when making a DHCP request the camera transmits its hostname as part of the DHCP request. This option is not user configurable. The cameras hostname matches the configurable parameter "camera name" on the Web User Interface. Any DHCP request contains the cameras hostname for use of the DHCP server to forward to an appropriate DNS server. You may need to apply for and create a domain name before you procced with this section.

Procedure 55 Configure Dynamic DNS

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- Select the **DDNS** tab.
- 3 Select the **Enable** check box to enable DDNS configuration.
- 4 Select the **Server Type** drop-down menu and select a server type.
- 5 Select the **User Name** text box and enter a user name.
- 6 Select the **Password** text box and enter a password.
- 7 Select the **Domain** text box and enter the domain.

8 Select the **Save** button to save the settings.

- End -

SNMP

This option is not available to the JSE04-T02-BI01, JSE04-D10-OI01, JSE04-D30-OI01, JSE04-B02-OI01 cameras. The camera introduces support for the Simple Network Management Protocol making it easier to manage on an IP network. The SNMP support includes support for V1, V2 and V3. Using V1 or V2 means no authentication is required to access the data and results are unencrypted. V3 offers enhanced encryption and authentication security features.

Procedure 56 Configure SNMP for V1 or V2

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the SNMP tab.
- 3 Select the Enable SNMP check box for V1 or V2 to enable or disable SNMP.
- 4 Enter the **Read SNMP Community** in the text box.
- 5 Enter the **Write SNMP Community** in the text box.
- 6 Enter the **Trap Address** IP number in the text box.
- 7 Enter the **Trap Port** number in the text box.
- 8 Enter the **Trap Community** number in the text box.
- 9 Select the **Save** button to save the settings.

- End -

Procedure 57 Configure SNMP for V3

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the SNMP tab.
- 3 Select the **Enable SNMv3** check box to enable or disable SNMPv3.
- 4 Enter the **Read User Name** in the text box.
- 5 Select the **Security Level** from the drop down menu:
 - no auth, no priv: No authentication / no encryption.
 - auth, no priv: Authentication / no encryption. A user password is required. It is symmetrically encrypted using either MD5 or SHA.
 - auth, priv: Authentication / encryption. A user password is required as is symmetrically encrypted using either MD5 or SHA. A data encryption password is required as is symmetrically encrypted using either DES or AES.
- 6 Select the Authentication Algorithm:
 - MD5
 - SHA
- 7 Select the Authentication Password text box and enter a password.
- 8 Select one of the following **Private-key Algorithms:**

- DES
- AES
- 9 Select the **Private-key Algorithm** text box and enter a password.
- 10 Enter the **Write User Name** in the text box.
- 11 Select the **Security Level** from the drop down menu:
 - no auth, no priv: No authentication / no encryption.
 - auth, no priv: Authentication / no encryption. A user password is required. It is symmetrically encrypted using either MD5 or SHA.
 - auth, priv: Authentication / encryption. A user password is required as is symmetrically encrypted using either MD5 or SHA. A data encryption password is required as is symmetrically encrypted using either DES or AES.
- 12 Select the Authentication Algorithm:
 - MD5
 - SHA
- 13 Select the **Authentication Password** text box and enter a password.
- 14 Select one of the following **Private-key Algorithms:**
 - DES
 - AES
- 15 Select the **Private-key Algorithm** text box and enter a password.
- 16 Select the **Save** button to save the settings.

- End -

Procedure 58 Enter the SNMP Port number

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- Select the SNMP tab.
- 3 Select the **SNMP Port t**ext box and enter a number.
- 4 Select the **Save** button to save the settings.

- End -

IEEE 802.1X

The IEEE 802.1x security feature provides port based network access control i.e. securing corporate networks from the attachment of unauthorized devices. Authentication is carried out through use of the Extensible Authentication Protocol or EAP. Both PEAP and TLS methods are supported.

Procedure 59 Configure IEEE 802.1x security

- Select Network on the Web User Interface banner and then select More.
- 2 Select the 802.1X tab.
- 3 Select the **Enable** check box to enable 802.1x configuration...

- 4 Select the **Protocol Type** drop-down menu and select a protocol type.
- 5 Select the **EAPOL Version** drop-down menu and select a version.
- 6 Select the **User Name** text box and enter a user name.
- 7 Select the **Password** text box and enter a password.
- 8 Select the **Confirm Password** text box and enter the domain.
- 9 Select the Save button to save the settings.

- End

RTSP

Tyco Security Products does not support or is not responsible for any error caused during the use of third party software used for RTSP playback

Procedure 60 Viewing RTSP Stream through media player

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the RTSP tab.
- 3 Select the **Enable** check box to enable RTSP configuration.
- 4 Select the **Port** text box and enter the access port of the streaming media. The default number is 554.
- 5 Select the **Address** text box and enter RTSP address (unicast) format that can be used to play the stream in a media player.
- 6 Select the **Save** button to save the settings.

- End -

UPnP Discovery

Enable or disable UPnP Discovery on the camera.

Procedure 61 Enable or disable UPnP Discovery

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the UPnP tab.
- 3 Select the **Enable** check box to enable and disable the UPnP Discovery.

- End -

E-mail

If you need to trigger Email when an alarm happens or IP address is changed, then set the e-mail address here first.

Procedure 62 Configure e-mail settings

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the **Email** tab.

- 3 Select the **Sender Address** text box and enter the e-mail address.
- 4 Select the **User Name** text box and enter the sender's user name.
- 5 Select the **Password** text box and enter the sender's password.
- 6 Select the Server Address text box and enter the SMTP IP address or host name.
- 7 Select the **Secure Connection** drop-down menu and select an option.
- 8 Select the **SMTP Port** text box and enter the port number.
- 9 Select the **Send Interval** check box and enter a number.

Note:For example, if this is set to 60 seconds and multiple motion detection alarms are triggered within 60 seconds, they will be considered as only one alarm event and only one email will be sent. If one motion alarm event is triggered and then another motion detection alarm event is triggered after 60 seconds, two emails will be sent. When different alarms are triggered at the same time, multiple emails will be sent separately.

- 10 Select the **Test** button to test the connection of the account.
- 11 Select the **Receipent Address** text box and enter the receipents e-mail address and then select the **Add** button.
- 12 Select the **Save** button to save the settings.

- End -

FTP

After an FTP server is set up, captured pictures from events will be uploaded to the FTP server.

Procedure 63 Adding FTP server settings

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the FTP tab.
- 3 Select the **Add** button.
- 4 Select the **Server Name** text box and enter the FTP server name.
- 5 Select the **Server Address** text box and enter the FTP IP address or domain name.
- 6 Select the **Port** text box and enter the FTP port number.
- 7 Select the **Username** text box and enter the FTP server login username.
- 8 Select the **Upload Path** text box and enter the directory where the file will be uploaded.
- 9 Select the **Save** button to save the settings.

- End -

Procedure 64 Modyfing FTP server settings

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the FTP tab.
- 3 Select the **Modify** button.
- 4 Select the **Server Name** text box and enter the FTP server name.

- 5 Select the **Server Address** text box and enter the FTP IP address or domain name.
- 6 Select the **Port** text box and enter the FTP port number.
- 7 Select the **Username** text box and enter the FTP server login username.
- 8 Select the Upload Path text box and enter the directory where the file will be uploaded.
- 9 Select the **Save** button to save the settings.

- End -

Procedure 65 Deleting an FTP server settings

- Select Network on the Web User Interface banner and then select More.
- 2 Select the **FTP** tab.
- 3 Select the FTP settings that you want to delete.
- 4 Select the **Delete** button.
- 5 Select the **Save** button to save the settings.

- End -

Procedure 66 Testing FTP server settings

- Select Network on the Web User Interface banner and then select More.
- 2 Select the FTP tab.
- 3 Select the FTP server settings in the list and then select the **Test** button.
- Select the **Save** button to save the settings. A sample text file will be sent to the specified FTP destination to confirm that FTP settings are correct.

- End -

HTTPS

HTTPs provide authentication of the web site and protects user privacy.

Procedure 67 Adding the default HTTPS certificate

- Select Network on the Web User Interface banner and then select More.
- 2 Select the HTTPS tab.

Note:There is a certificate installed by default.

3 Select the **Enable** button to enable HTTPS configuration.

Note:When you enable HTTPS then a check box is visible to disable HTTP. Select the check box to disable HTTP.

4 Select the **Save** button.

Note:The camera can be accessed by entering https://IP: https port via the web browser (eg. https://192.168.226.201:443).

- End -

Procedure 68 Adding a private HTTPS certificate

A private certificate can be created if users don't want to use the default one.

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the HTTPS tab.

Note: There is a certificate installed by default

- 3 Select the **Delete** button to delete the default HTTPS certificate.
- If you have a signed certificate, select the **Browse** button to naviagate to it and then select **Install** to install it.

Or

Select the **Create a private certificate** option and then select the **Create** button to create a private certificate and enter the following:

- Country (only two letters available).
- Domain (camera's IP address/domain).
- · Validity date
- Password
- Province/state
- Region
- 5 Select the **Save** button to save the settings.

- End -

Procedure 69 Request an HTTPS certificate

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the HTTPS tab.

Note: There is a certificate installed by default

3 Select the **Delete** button to delete the default HTTPS certificate.

Select the Create a certificate request option and then select the Create button.

Then download the certificate request and submit it to the trusted certificate authority for signature. After receiving the signed certificate, import the certificate to the device.

4 Select the **Save** button to save the settings.

- End -

Quality of Service (QoS)

QoS (Quality of Service) function is used to provide different quality of services for different network applications. With the deficient bandwidth, the router or switch will sort the data streams and transfer them according to their priority to solve the network delay and network congestion by using this function.

Procedure 70 Enabling SPVMN and viewing its details

- 1 Select **Network** on the Web User Interface banner and then select **More**.
- 2 Select the QoS tab.
- 3 Select the **Video/Audio DSCP** text box and enter a value. The range is from 0 to 63.
- 4 Select the **Alarm DSCP** text box and enter a value. The range is from 0 to 63.
- 5 Select the **Manager DSCP** text box and enter a value. The range is from 0 to 63. Generally speaking, the larger the number is, the higher the priority is.
- 6 Select the **Save** button to save the settings.

- End -

Maintenance

In this section you can import and export settings from one camera to another, reboot the camera, update the camera firmware and view and export log information.

Figure 60 Maintenance settings menu page



Backup and Restore

You can import and export settings from one camera to another.

Procedure 71 Importing settings from one camera to another

- Select **Maintenance** on the Web User Interface banner to view the **Backup and Restore** tab.
- 2 Select the **Choose File** button and navigate to the import information on your computer.
- 3 Select the **Import Setting** button to import the settings.
- 4 Select the **Save** button to save the settings.

- End -

Procedure 72 Exporting settings from one camera to another

- Select **Maintenance** on the Web User Interface banner to view the **Backup and Restore** tab.
- 2 Select the **Choose File** button and navigate to the export information on your computer.

Select the **Export Settings** button to export the settings.

Or

Select the **Export Temp Data** button to export the temperature data.

3 Select the **Save** button to save the settings.

- End -

Procedure 73 Restore settings to their factory default state

Select Maintenance on the Web User Interface banner to view the Backup and Restore tab.

You can restore all settings to their factory default state or select specific settings that you want to keep before you restore others settings to their factory default state.

Select the Load Default button to restore all settings to their factory default state.

Or

Select the check box of the settings that you do **not** want to restore to their factory default settings and then select the **Load Default** button.

- End -

Reboot

You can reboot the camera.

Procedure 74 Rebooting the camera

- 1 Select **Maintenance** on the Web User Interface banner and then select **Reboot**.
- 2 Select the **Reboot** button the reboot the camera.

Note: This may take up to 5 minutes. Once successful the browser reconnects automatically.

- End -

Procedure 75 Enabling a timed reboot

- 1 Select **Maintenance** on the Web User Interface banner and then select **Reboot**.
- Select the Time Settings check box and then select a Date and Time.
- 3 Select the Save button to save the settings

- End -

Upgrade

You can update the camera firmware.

Procedure 76 Updating the camera firmware

- 1 Select Maintenance on the Web User Interface banner and then select Upgrade.
- 2 Select the **Browse** button and navigate to the upgrade firmware file.
- 3 Select the **Upgrade** button to start upgrading the firmware.

The device restarts automatically.

Note:Do not close the browser or disconnect the camera from the network during the upgrade.

- End -

Log

You can view and export log information.

Procedure 77 Viewing and exporting logs

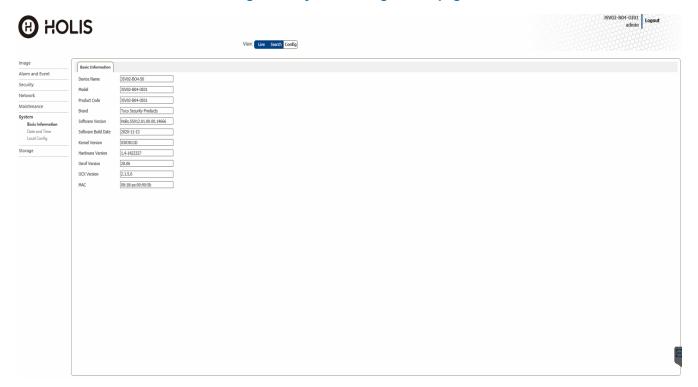
- Select **Maintenance** on the Web User Interface banner and then select **Log** to view a list of all log information.
- 2 Select the **Main Type** drop-down list and select a log type or all logs.
- 3 Select the **Sub Type** drop-down list and select a sub log type or all logs.
- 4 Select the **Start Time** calendar icon and select a date and time.
- 5 Select the **End Time** calendar icon and select a date and time.
- 6 Select the **Search** button to view the operation log.
- 7 Select the **Export** button to export the operation log.

- End -

System

In this section you can view the following system information, Device Name, Model, Product Code, Brand, Software Version, Software Build Date, Kernel Version, Hardware Version, Onvif Version, Temperature Version, Video Structured Version, Face Detection Version, OCX Version and MAC.

Figure 61 System settings menu page



Basic Information

In this section you can view the following system information in this section, Device Name, Model, Product Code, Brand, Software Version, Software Build Date, Kernel Version, Hardware Version, Onvif Version, Temperature Version, Video Structured Version, Face Detection Version, OCX Version and MAC.

Procedure 78 Viewing the system information

1 Select System on the Web User Interface banner to view the Basic Information tab.

- End -

Date and Time

You can select a time zone and daylight saving time.

Procedure 79 Selecting a time zone and enabling daylight saving time

- Select System on the Web User Interface banner to view the Date and Time option in the menu list.
- Select Date and Time to view the Zone tab menu.
- 3 Select the **Zone** drop-down menu and select a time zone.
- 4 Select the **DST** check box to enable DST.
- 5 Select **Auto DST** to automatically select the DST.

OR

Select Manual DST and then enter a Start Time and End Time.

- 6 Select the **Time Offse**t drop-down menu and select an option.
- 7 Selct the **Save** button to save the settings.

- End

Procedure 80 Setting the Date and Time

- Select **System** on the Web User Interface banner to view the **Date and Time** option in the menu list.
- Select Date and Time and then the Date and Time tab.

You can synchronize the date and time with the NTP server, synchronize the date and time with the computer or manually set the date and time. Select one of the following:

- a To synchronize with the NTP server: select the **Synchronize with NTP** option and then the **NTP server** text box and enter the IP Address. Select the **Update period** text box and enter a number.
- a To synchronize with the computer: select the **Synchronize with computer time** option and then the **Date** text box and enter a date. Select the **Time** text box and enter a time.
- a To set manually: select the **Set Manually** option and then the **Date** text box and enter a date. Select the **Time** text box and enter a time.
- 3 Select the **Save** buton to save the settings.

- End -

Local Config

You can set up the storage path of captured pictures and recorded videos on the local PC. There is also an option to enable or disable the bitrate display in the recorded files.

Procedure 81 Selecting a folder to save snapshots and recording files

- Select System on the Web User Interface banner to view the Local Config option in the menu list.
- 2 Select Local Config to view the Local Config menu.
- 3 Select the Save snapshots to **Browse** button and navigate to the folder that you want to save the snapshots in.
- 4 Select the Save Recording file to **Browse** button and navigate to the folder that you want to save the recording files in.

- 5 Select the **Audio Recording** 'Open' or 'Close' option.
- 6 Select the **Bitrate Overlay** 'Open' or 'Close' option.
- 7 Select the **Local Smart Snapshot Storage** 'Open' or 'Close' option.
- 8 Select the **Save** button to save the settings.

- End -

Storage

In this section you can eject or format the SD Card and divide space up on the SD card between snapshots and videos. You can set recording parameters and schedule the recording date and time. You can set the format, resolution and quality of the image saved on the SD card, the snapshot interval, quantity and snapshot timing. When you configure the Offline Record Settings feature and once it detects a loss of connection with the recorder, it sends the video stream to the Micro SD card within the unit. This satisfies the loss of video and continues recording. Once the recorder is back online the camera initiates sending recorded video from the Micro SD card to the recorder. The maximum time recording during the outage depends on the Micro SD card and the recorded stream you selected. If the Micro SD reaches full capacity, it deletes video from earliest.

If an event action has record mode enabled, when triggered, the associated video is logged in the event download table where it can later be downloaded from an Micro SD Card using the specified upload protocol.

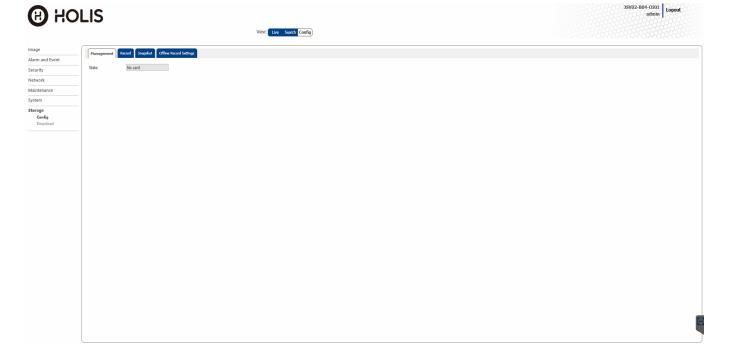


Figure 62 Storage settings menu page

Config

In this section you can eject or format the SD Card and divide space up on the SD card between snapshots and videos. You can set recording parameters and schedule the recording date and time. You can set the format, resolution and quality of the image saved on the SD card, the snapshot interval, quantity and snapshot timing. When you configure the Offline Record Settings feature and once it detects a loss of connection with the recorder, it sends the video stream to the Micro SD card within the unit. This satisfies the loss of video and continues recording. Once the recorder is back online the camera initiates sending recorded video from the Micro SD card to the recorder. The maximum time recording during the outage depends on the Micro SD card and the recorded stream you selected. If the Micro SD reaches full capacity, it deletes video from earliest.

Procedure 82 SD Card Management

- Select Storage on the Web User Interface banner to view the Management tab.
- 2 You can format or Eject the SD card.
 - a Select the Format button to format the SD card. All data is cleared by selecting this button.
 - Select the **Eject** button to stop writing data to SD card. Then the SD card can be ejected safely.

You can divide the SD card up to hold a percentage of snapshots and videos.

- 3 Select the **Snapshot Quota** text box and enter a value. This percentage of the SD is available for snapshots.
- 4 Select the Video Quota text box and enter a value. This percentage of the SD is available for videos.

- End -

Procedure 83 Schedule a recording

- Select Storage on the Web User Interface banner and then select the Record tab.
- Select the **Record Stream** drop-down menu and select a stream.
- 3 Select the **Pre Record Time** drop-down menu and select a pre record time.
- 4 Select the **Cycle White** drop-down menu and select an option.
- 5 See Procedures 32 and 33 for assistance with scheduling an event / alarm.

- End -

Procedure 84 Setting snapshot parameters

- Select **Storage** on the Web User Interface banner and then select the **Snapshot** tab.
- 2 Select the **Image Format** drop-down menu and select an format.
- 3 Select the **Resolution** drop-down menu and select a resolution.
- 4 Select the **Image Quality** drop-down menu and select an image quality.
- 5 Select the **Snapshot Interval** text box and enter a number.
- 6 Select the **Snapshot Quantity** text box and enter a number.

Note:This is the maximum quantity of snapshots. The actual quantity of snapshots may be less than this number. For example, if the occurrence time of an alarm event is less than the time of capturing pictures, the actual quantity of snapshots is less than the set quantity of snapshots.

- 7 Select the **Enable Timing Snapshot** check box to enable a snapshot interval.
- 8 Select the **Snapshot Interval** text box and enter a number.
- 9 See Procedures 32 and 33 for assistance with scheduling an event / alarm.

- End -

Procedure 85 Configure offline recording settings

- Select **Storage** on the Web User Interface banner and then select the **Offline Record Settings** tab.
- 2 Select the **Enable** check box to enable offline record settings.
- 3 Select the **NVR IP Address** text box and enter the IP address.
- 4 Select the **Pre Record Time** text box and enter a number.
- 5 Select the **Record Delay** text box and enter a number.
- 6 Select the **Save** button to save the settings.

- End -

Download

If an event action has record mode enabled, when triggered, the associated video is logged in the event download table where it can later be downloaded from an Micro SD Card using the specified upload protocol.

Procedure 86 Configure offline recording settings

- 1 Select **Storage** on the Web User Interface banner and then select **Download**.
- 2 Select the **Start Time** calendar icon and select a date and time.
- 3 Select the **End Time** calendar icon and select a date and time.
- 4 Select the **Search button** to view all downloads.

- End -

Appendix A: Using Media Player to View RTSP Streaming

Note: This appendix is provided for user instruction only. Tyco Security Products does not support or is not responsible for any error caused during the use of third party software used for RTSP playback.

Procedure 87 Procedure 106 Viewing RTSP Stream through Media Player

Step Action

You can use Media Player to view live video in real time from the camera.

- 1 Select **Media** then **Open Network Stream**.
- 2 Enter the IP address of the camera stream in the **Network URL** text box in the following format to view Stream 1.
 - Stream 1: rtsp://IP or domain name:port/profile1

For example: rtsp://192.168.1.168:554/profile1

3 Select Play. The live video stream displays.

- End -

Appendix B: Technical Specifications

The table below lists technical specifications of the Holis 4MP IR Bullet camera.

Product Code	JSE04-B02-O0I1		
	Camera		
Imager	1 / 2.7" CMOS		
Effective Pixels	2560 × 1440		
	0.016 Lux,F1.4,AGC ON;		
Minimum Illumination	0.04 Lux, F2.26,AGC ON; 0 lux with IR		
Shutter Speed	PAL: 1/25 s ~ 1/100000 s NTSC: 1/30 s ~ 1/100000 s		
S/N Ratio	≥52 dB		
Adjustment angle	Any angle		
	Lens		
Focal length	2.8 ~ 12 mm @F1.4		
Iris type	Fixed Iris		
Field of view	Horizontal: 94°~ 35.7°, Vertical: 62.2°~20.5°		
Focus control	Manual focus		
	Video		
Video Compression	H.264 / H.265		
H.264 Compression Standard	Base Line / Main Profile / High Profile		
H.265 Compression Standard	Main Profile @Leve4.1 High Tier		
Resolution	4MP (2560 × 1440), 3MP (2304 × 1296),1080P (
Resolution	1920×1080), 720P (1280×720), D1, CIF, 480×240		
Max.Frame Rate	25/30fps @ all resolution		
Video Bit Rate	64 Kbps ~ 5 Mbps		
Multiple Streaming	Triple stream		
	60Hz : 4MP/1080P/720P(1~30fps)		
Stream 1	50Hz : 4MP/1080P/720P(1~25fps)		
	2592x1944 2592x1520 2560x1440 2304x1296 1920x1080 1280x720		
Stream 2	60Hz : 720P(1~15fps)/D1 /CIF (1~30fps)		

	50Hz: 720P(1~12fps)/D1(1~25fps)/CIF (1~25fps)		
Stream 3	"60Hz : D1/CIF/480x240 (1~30fps);		
	50Hz: D1/CIF/480x240 (1~25fps)"		
Bitrate Control	VBR / CBR		
Quality Control	5 levels under VBR; Freely adjustable under CBR		
Image Setting	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR.		
	Audio		
Audio Communication	None		
Audio Compression Format	None		
Audio Bit Rate	None		
Operational Control Co			
Day and Night	IR cut filter with auto switch		
Backlight Com- pensation	Yes		
Wide Dynamic Range	Digital WDR		
IR Distance	Up to 50M		
Digital Noise Reduc- tion	2D/3D DNR		
Digital Zoom	Yes		
Flip / Mirror	Yes		
Video Privacy	4 zone video mask		
Alarm Triggers	Motion detection		
Edge Storage	Yes, built-in micro SD card slot up to 128GB		
	Network		
Network Protocol	TCP / IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, SNMP, UPnP, Unicast, Multicast		
Cyber Security	HTTPS / IP Filter / IEEE 802.1X / Blacklist & white list / account security		
Online Connection	Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission		
API	ONVIF (Profile S/G), iAPI3		
Supported languages	Chinese (Simplified), English, Korean, Portuguese, Spanish		
Interface			

Network	RJ45	
Audio	None	
Video output	None	
Onboard storage	Built-in micro SD/SDHC/SDXC slot	
Alarm I/O	None	
Environmental		
Operating Temperature	- 30 °C ~ 60 °C	
Operating Humidity	10 % ~ 90 % relative humidity	
Ingress Protection	IP67	
Vandal Resistance	IK10	
General		
Power Supply	DC12V / PoE	
Power Consumption	<10W	
Dimensions (mm)	225.7 x 86.7 x 83.8	
Weight	0.7kg	
Certification	CE, FCC	

The table below lists technical specifications of the Holis 2MPVarifocal IR Bullet camera.

Product Code	JSV02-B04-O0I1		
	Camera		
Imager	1 / 2.8" CMOS		
Effective Pixels	1920 × 1080		
Minimum Illumination	0.008 Lux, F1.6, AGC ON, 0 lux with IR		
Shutter Speed	PAL: 1/25 s ~ 1/100000 s NTSC: 1/30 s ~ 1/100000 s		
S/N Ratio	≥52 dB		
	Lens		
Focal length	7 ~ 22 mm @F1.4, Motorized		
Iris type	DC-lris		
Field of view	Horizontal: 43.4°~ 17.6° Vertical: 25.2°~9.9°		
Focus control	auto-focus		
	Video		
Video Compression	H.264 / H.265		
H.264 Compression Standard	Base Line / Main Profile / High Profile		
H.265 Compression Standard	Main Profile @Leve4.1 High Tier		
Resolution	1080P (1920 x 1080), 720P (1280 x 720), D1, CIF, 480 x 240		
Max.Frame Rate	25/30fps @ all resolution		
Video Bit Rate	64 Kbps ~ 6 Mbps		
Multiple Streaming	Triple stream		
Stream 1	60Hz: 1080P(1 ~ 30fps)/720P(1 ~ 30fps)		
- Circum I	50Hz: 1080P(1 ~ 25fps)/720P(1 ~ 25fps)		
Stream 2	60Hz:720P/D1/CIF /480×240 (1~30fps)		
	50Hz:720P/D1/CIF/480×240 (1~25fps)		
Stream 3	60Hz:D1/CIF /480×240 (1~30fps)		
	50Hz:D1/CIF/480×240 (1~25fps)		
Bitrate Control	VBR / CBR		
Quality Control	5 levels under VBR; Freely adjustable under CBR		
Image Setting	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR.		

	Audio		
Audio Communication	Bi-directional audio (2-way)		
Audio Compression Format	G711A/U		
Audio Bit Rate	128Kbps		
	Operational Operat		
Day and Night	IR cut filter with auto switch		
Backlight Compensation	Yes		
Wide Dynamic Range	True WDR, 120dB		
IR Distance	Up to 100M		
Digital Noise Reduction	2D/3D DNR		
Digital Zoom	Yes		
Corridor Mode	Yes		
Flip / Mirror	Yes		
Video Privacy	4 zone video mask		
Alarm Triggers	Alarm input, Motion detection		
Edge Storage	Yes, built-in micro SD card slot up to 128GB		
Network			
Network Protocol	TCP / IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, SNMP, UPnP, Unicast, Multicast		
Cyber Security	HTTPS / IP Filter / IEEE 802.1X /Blacklist & whitelist/account security/telnet access control/serial password		
Online Connection	Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission		
API	ONVIF (Profile S/G), iAPI3		
Supported languages	Chinese (Simplified), English, Korean, Portuguese, Spanish		
	Interface		
Network	RJ45		
Audio	Line IN × 1, Line OUT × 1		
Video output	CVBS video output (BNC × 1)		
Onboard storage	Built-in micro SD/SDHC/SDXC slot		
Alarm I/O	1 in / 1 out		
Environmental			

Operating Temperature	- 30 °C ~ 60 °C	
Operating Humidity	10 % ~ 90 % relative humidity	
Ingress Protection	IP67	
Vandal Resistance	IK10	
General		
Power Supply	AC24V / DC12V / PoE	
Power Consumption	<12W	
Dimensions (mm)	278.7 × 95.9 × 94.4	
Weight	1.15kg	
Certification	CE, FCC	

The table below lists technical specifications of the Holis 4MP IR Turret Dome camera.

Product Code	JSE04-T02-BI01
	Camera
Imager	1 / 2.7" CMOS
Effective Pixels	2560 × 1440
Maining over 111 over in a bion	0.016 Lux,F1.4,AGC ON;
Minimum Illumination	0.04 Lux, F2.2, AGC ON; 0 lux with IR
Shutter Speed	PAL: 1/25 s ~ 1/100000 s NTSC: 1/30 s ~ 1/100000 s
S/N Ratio	≥52 dB
Adjustment angle	Pan : 0°~360°, Tilt : 0°~80°, Rotation : 0°~360°
	Lens
Focal length	2.8 ~ 12 mm @F1.4
Iris type	Fixed Iris
Field of view	Horizontal: 94°~ 35.7°, Vertical: 62.2°~20.5°
Focus control	Manual focus
	Video
Video Compression	H.264 / H.265
H.264 Compression Standard	Base Line / Main Profile / High Profile
H.265 Compression Standard	Main Profile @Leve4.1 High Tier
Resolution	4MP (2560 × 1440), 3MP (2304 × 1296),1080P (
Resolution	1920×1080), 720P (1280×720), D1, CIF, 480×240
Max.Frame Rate	25/30fps @ all resolution
Video Bit Rate	64 Kbps ~ 5 Mbps
Multiple Streaming	Triple stream
Stream 1	60Hz : 4MP/1080P/720P(1~30fps)
Ottodin 1	50Hz : 4MP/1080P/720P(1~25fps)
Stream 2	60Hz: 720P(1~15fps)/D1 /CIF (1~30fps)
-	50Hz: 720P(1~12fps)/D1(1~25fps)/CIF (1~25fps)
Stream 3	60Hz : D1/CIF/480x240 (1~30fps);
	50Hz: D1/CIF/480x240 (1~25fps)
Smart Codec	ROI, 3 zones

Bitrate Control	VBR / CBR	
Quality Control	5 levels under VBR; Freely adjustable under CBR	
Image Setting	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR.	
	Audio	
Audio Communication	Built-in MIC	
Audio Compression Format	G711A/U	
Audio Bit Rate	128Kbps	
Operational		
Day and Night	IR cut filter with auto switch	
Backlight Compensation	Yes	
Wide Dynamic Range	Digital WDR	
IR Distance	Up to 50M	
Digital Noise Reduction	2D/3D DNR	
Digital Zoom	Yes	
Flip / Mirror	Yes	
Video Privacy	4 zone video mask	
Alarm Triggers	Motion detection	
Edge Storage	Yes, built-in micro SD card slot up to 128GB	
	Network	
Network Protocol	TCP / IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, SNMP, UPnP, Unicast, Multicast	
Cyber Security	HTTPS / IP Filter / IEEE 802.1X /Blacklist & whitelist/account security/telnet access control/serial password	
Online Connection	Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission	
API	ONVIF (Profile S/G), iAPI3	
Supported languages	Chinese (Simplified), English, Korean, Portuguese, Spanish	
	Interface	
Network	RJ45	
Audio	Built-in MIC	
Video output	None	

Onboard storage	Built-in micro SD/SDHC/SDXC slot		
Alarm I/O	None		
	Environmental		
Operating Temperature	- 30 °C ~ 60 °C		
Operating Humidity	10 % ~ 90 % relative humidity		
Ingress Protection	IP67		
Vandal Resistance	-		
General			
Power Supply	DC12V / PoE		
Power Consumption	<6W		
Dimensions (mm)	130 × 110		
Weight	0.65kg		
Certification	CE, FCC		

The table below lists technical specifications of the Holis 2MP Motorized Varifocal IR Dome camera.

Product Code	JSV02-D02-OI01	
Camera		
Imager	1 / 2.8" CMOS	
Effective Pixels	1920 × 1080	
Minimum Illumination	0.008 Lux, F1.6, AGC ON, 0 lux with IR	
Shutter Speed	PAL: 1/25 s ~ 1/100000 s NTSC: 1/30 s ~ 1/100000 s	
S/N Ratio	≥52 dB	
Adjustment angle	Pan: 0°~360°, Tilt: 0°~77°, Rotation: 0°~360°	
Lens		
Focal length	2.8 ~ 12 mm @F1.4, Motorized	
Iris type	DC-lris	
Field of view	Horizontal: 103°~ 32°, Vertical: 70.5°~18.3°	
Focus control	auto-focus	
Video		
Video Compression	H.264 / H.265	
H.264 Compression Standard	Base Line / Main Profile / High Profile	

H.265 Compression Standard	Main Profile @Leve4.1 High Tier	
Resolution	1080P (1920 x 1080), 720P (1280 x 720), D1, CIF, 480 x	
	240	
Max.Frame Rate	25/30fps @ all resolution	
Video Bit Rate	64 Kbps ~ 5 Mbps	
Multiple Streaming	Triple stream	
Stream 1	60Hz: 1080P(1 ~ 30fps)/720P(1 ~ 30fps)	
Sueam i	50Hz: 1080P(1 ~ 25fps) / 720P(1 ~ 25fps)	
Stream 2	60Hz:720P/D1/CIF /480×240 (1~30fps)	
Ottouri 2	50Hz:720P/D1/CIF/480×240 (1~25fps)	
Stream 3	60Hz:D1/CIF /480×240 (1~30fps)	
	50Hz:D1/CIF/480×240 (1~25fps)	
Bitrate Control	VBR / CBR	
Quality Control	5 levels under VBR; Freely adjustable under CBR	
Image Setting	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR.	
Audio		
Audio Communication	Bi-directional audio (2-way)	
Audio Compression Format	G711A/U	
Audio Bit Rate	128Kbps	
	Operational	
Day and Night	IR cut filter with auto switch	
Backlight Compensation	Yes	
Wide Dynamic Range	True WDR, 120dB	
IR Distance	Up to 50M	
Digital Noise Reduction	2D/3D DNR	
Digital Zoom	Yes	
Corridor Mode	Yes	
Flip / Mirror	Yes	
Video Privacy	4 zone video mask	
Alarm Triggers	Alarm input, Motion detection	
Edge Storage	Yes, built-in micro SD card slot up to 128GB	

Network		
Network Protocol	TCP / IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, SNMP, UPnP, Unicast, Multicast	
Cyber Security	HTTPS / IP Filter / IEEE 802.1X /Blacklist & whitelist/account security/telnet access control/serial password	
Online Connection	Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission	
API	ONVIF (Profile S/G), iAPI3	
Supported languages	Chinese (Simplified), English, Korean, Portuguese, Spanish	
Interface		
Network	RJ45	
Audio	Line IN × 1, Line OUT × 1	
Video output	CVBS video output (BNC × 1)	
Onboard storage	Built-in micro SD/SDHC/SDXC slot	
Alarm I/O	1 in / 1 out	
	Environmental	
Operating Temperature	- 30 °C ~ 60 °C	
Operating Humidity	10 % ~ 90 % relative humidity	
Ingress Protection	IP67	
Vandal Resistance	IK10	
General		
Power Supply	AC24V / DC12V / PoE	
Power Consumption	< 10.5W	
Dimensions (mm)	150 × 114	
Weight	1.05kg	
Certification	CE, FCC	

The table below lists technical specifications of the Holis 4MP Motorized Varifocal IR Dome camera.

Product Code	JSA04-D02-OI01	
	Camera	
Imager	1 / 2.8" CMOS	
Effective Pixels	2560× 1440	
Minimum Illumination	00.016 Lux,F1.4,AGC ON	
Shutter Speed	PAL: 1/25 s ~ 1/100000 s NTSC: 1/30 s ~ 1/100000 s	
S/N Ratio	≥52 dB	
Adjustment angle	Pan : 0°~360°, Tilt : 0°~77°, Rotation : 0°~360°	
Lens		
Focal length	2.8 ~ 12 mm @F1.4, Motorized	
Iris type	DC-Iris	
Field of view	Horizontal: 103°~ 32°, Vertical: 70.5°~18.3°	
Focus control	auto-focus	
	Video	
Video Compression	H.264 / H.265	
H.264 Compression Standard	Base Line / Main Profile / High Profile	
H.265 Compression Standard	Main Profile @Leve4.1 High Tier	
Resolution	4MP (2560×1440),3MP(2304×1296), 1080P (1920×1080), 720P (1280×720),D1, CIF, 480×240	
Max.Frame Rate	25/30fps @ all resolution,60fps @ 1080P	
Video Bit Rate	128 Kbps ~ 10 Mbps	
Multiple Streaming	Triple stream	
Stream 1	60Hz:4MP(1~30fps)/3MP(1~30fps)/1080P(1~60fps)/ 720P(1~30fps) 50Hz:4MP(1~25fps)/3MP(1~25fps)/1080P(1~50fps)/ 720P(1~25fps)	
Stream 2	60Hz:1080P/720P/D1/CIF /480×240 (1~30fps) 50Hz:1080P/720P/D1/CIF/480×240 (1~25fps)	
Stream 3	60Hz: D1(1~30fps)/480x240(1~30fps)/CIF(1~30fps) 50Hz: D1(1~25fps)/480x240(1~25fps)/CIF(1~25fps)	
Bitrate Control	VBR / CBR	
Quality Control	5 levels under VBR; Freely adjustable under CBR	

Image Setting	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR.	
	Audio	
Audio Communication	Bi-directional audio (2-way)	
Audio Compression Format	G711A/U	
Audio Bit Rate	128Kbps	
Operational		
Day and Night	IR cut filter with auto switch	
Backlight Compensation	Yes	
Wide Dynamic Range	True WDR, 120dB	
IR Distance	Up to 50M	
Digital Noise Reduction	2D/3D DNR	
Digital Zoom	Yes	
Corridor Mode	Yes	
Flip / Mirror	Yes	
Video Privacy	4 zone video mask	
Alarm Triggers	Alarm input, Motion detection	
Edge Storage	Yes, built-in micro SD card slot up to 128GB	
	Network	
Network Protocol	TCP / IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, SNMP, UPnP, Unicast, Multicast	
Cyber Security	HTTPS / IP Filter / IEEE 802.1X /Blacklist & whitelist/account security/telnet access control/serial password	
Online Connection	Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission	
API	ONVIF (Profile S/G), iAPI3	
Supported languages	Chinese (Simplified), English, Korean, Portuguese, Spanish	
	Interface	
Network	RJ45	
Audio	MIC IN × 1, MIC OUT × 1	
Video output	CVBS video output (BNC × 1)	
Onboard storage	Built-in micro SD/SDHC/SDXC slot, up to 128GB	

Alarm I/O	1 in / 1 out	
Environmental		
Operating Temperature	- 30 °C ~ 60 °C	
Operating Humidity	10 % ~ 90 % relative humidity	
Ingress Protection	IP67	
Vandal Resistance	IK10	
General		
Power Supply	AC24V / DC12V / PoE	
Power Consumption	< 9.5W	
Dimensions (mm)	150 × 114	
Weight	1.05kg	
Certification	CE, FCC	

The table below lists technical specifications of the Holis 4MP IR Dome cameras.

Product Code	JSE04-D10-OI01 / JSE04-D10-OI01	
	Camera	
Imager	1/2.7" CMOS	
Effective Pixels	2560× 1440	
Minimum Illumination	0.04 Lux, F2.2, AGC ON; 0 lux with IR	
Shutter Speed	PAL: 1/25 s ~ 1/100000 s NTSC: 1/30 s ~ 1/100000 s	
S/N Ratio	≥52 dB	
Adjustment angle	Pan: 0°~355°, Tilt: 0°~67°, Rotation: 0°~355°	
	Lens	
Focal length	2.8 mm @ F2.0 / 3.6 mm @ F2.2	
Iris type	Fixed Iris	
Field of view	2.8 mm@F2.0, horizontal field of view:110°, Vertical: 77.6° 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°	
Focus control	None required	
Video		
Video Compression	H.264 / H.265	
H.264 Compression Standard	Base Line / Main Profile / High Profile	
H.265 Compression Standard	Main Profile @Leve4.1 High Tier	
Resolution	4MP (2560 × 1440), 3MP (2304 × 1296),1080P (1920×1080), 720P (1280×720), D1, CIF, 480×240	
Max.Frame Rate	25/30fpsfps @ all resolution	
Video Bit Rate	64 Kbps ~ 5 Mbps	
Multiple Streaming	Triple stream	
Stream 1	60Hz: 4MP/3MP/1080P(1~30fps) 50Hz: 4MP/3MP/1080P(1~25fps)	
Stream 2	60Hz: 720P(1~15fps)/D1 /CIF (1~30fps) 50Hz: 720P(1~12fps)/D1(1~25fps)/CIF (1~25fps)	
Stream 3	60Hz: D1/CIF/480x240 (1~30fps) 50Hz: D1/CIF/480x240 (1~25fps)	
Bitrate Control	VBR / CBR	
Quality Control	5 levels under VBR; Freely adjustable under CBR	

Image Setting	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR.		
	Audio		
Audio Communication	None		
Audio Compression Format	None		
Audio Bit Rate	None		
	Operational		
Day and Night	IR cut filter with auto switch		
Backlight Compensation	Yes		
Wide Dynamic Range	Digital WDR		
IR Distance	Up to 30M		
Digital Noise Reduction	2D/3D DNR		
Digital Zoom	Yes		
Flip / Mirror	Yes		
Video Privacy	4 zone video mask		
Alarm Triggers	Motion detection		
Edge Storage	Yes, built-in micro SD card slot up to 128GB		
	Network		
Network Protocol	TCP / IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, SNMP, UPnP, Unicast, Multicast		
Cyber Security	HTTPS / IP Filter / IEEE 802.1X /Blacklist & whitelist/account security/telnet access control/serial password		
Online Connection	Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission		
API	ONVIF (Profile S/G), iAPI3		
Supported languages	Chinese (Simplified), English, Korean, Portuguese, Spanish		
Interface			
Network	RJ45		
Video output	None		
Onboard storage	Built-in micro SD/SDHC/SDXC slot, up to 128GB		
Alarm I/O	None		
Environmental			
Operating Temperature	- 30 °C ~ 60 °C		

Operating Humidity	10 % ~ 90 % relative humidity	
Ingress Protection	IP67	
Vandal Resistance	IK10	
General		
Power Supply	DC12V / PoE	
Power Consumption	< 6W	
Dimensions (mm)	116.7 × 90	
Weight	0.61kg	
Certification	CE, FCC	

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